CDX-MP40

SERVICE MANUAL

Ver 1.0 2003. 01

US Model
Canadian Model
AEP Model
UK Model

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-393MC-121
Optical Pick-up Name	KSS-721A

AUDIO POWER SPECIFICATIONS (US Model)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23.2 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

SPECIFICATIONS

CD player section

Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 107.9 MHz (US, Canadian Model) 87.5 – 108.0 MHz (AEP, UK Model)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM (US, Canadian Model)

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

MW/LW (AEP, UK Model)

Tuning range	MW : 531 – 1,602 kHz LW : 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW : 30 µV LW : 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	52 W × 4 (at 4 ohms) (US, Canadian Model) 50 W × 4 (at 4 ohms) (AEP, UK Model)

General

Outputs	Audio outputs (front/rear) Power antenna relay control terminal Power amplifier control terminal
Inputs	Telephone ATT control terminal BUS control input terminal BUS audio input terminal Remote controller input terminal Antenna input terminal
Tone controls	Low: ±10 dB at 60 Hz (XPLOD) Mid: ±10 dB at 1 kHz (XPLOD) High: ±10 dB at 10 kHz (XPLOD)

– Continued on next page –

FM/AM COMPACT DISC PLAYER

US, Canadian Model

FM/MW/LW COMPACT DISC PLAYER

AEP, UK Model

9-877-000-01
2003A0400-1

Sony Corporation
e Vehicle Company
Published by Sony Engineering Corporation

SONY®

Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 180 mm (7 1/8 × 2 × 7 1/8 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (7 1/4 × 2 1/8 × 6 3/8 in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections Front panel case (1) Card remote commander RM-X115

Note

This unit cannot be connected to a digital preamplifier or an equalizer which is Sony BUS system compatible.

Design and specifications are subject to change without notice.

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

TEST DISCS

This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

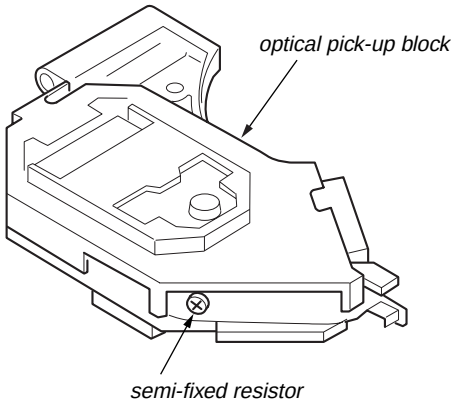
CD-R test disc TCD-R082LMT (Part No. J-2502-063-1)
CD-RW test disc TCD-W082L (Part No. J-2502-063-2)

- US, Canadian model

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



- AEP, UK model

CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

CAUTION—INVISIBLE LASER RADIATION WHEN OPEN
DO NOT STARE INTO BEAM OR
VIEW DIRECTLY WITH OPTICAL INSTRUMENTS

This label is located on the drive unit's internal chassis.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)

This unit can play the following discs:

Type of discs	Label on the disc
Audio CD	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 files	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

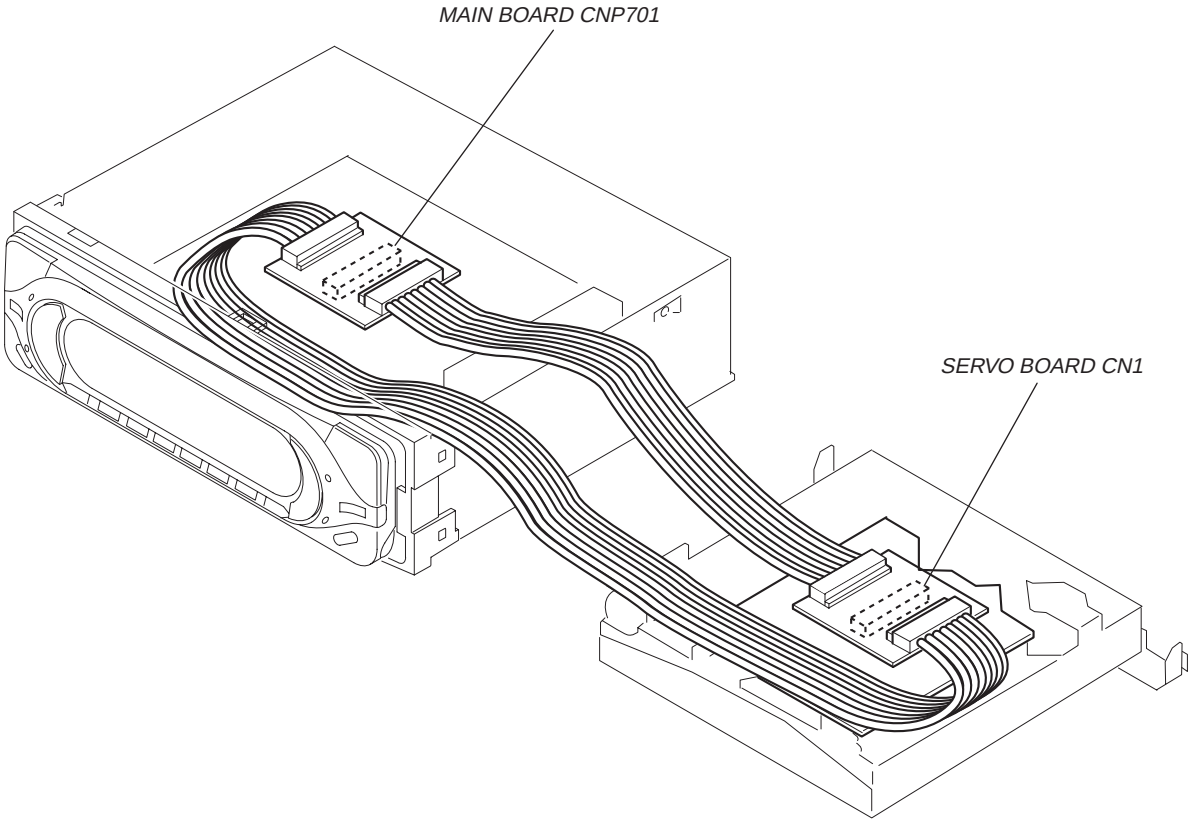
- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.
- A CD-R/CD-RW to which a session can be added can be played.

* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CNP701) and the SERVO board (CN1) with the extension cable (Part No. J-2502-062-1).



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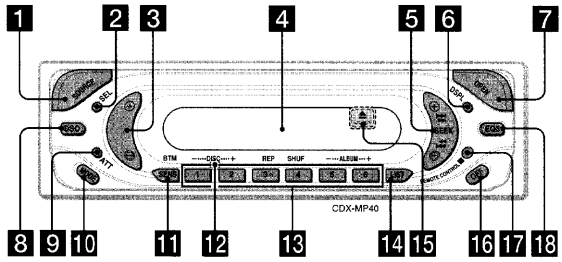
SECTION 1
GENERAL

This section is extracted from instruction manual.

Location of controls (US, Canadian Model)

Refer to the pages listed for details.

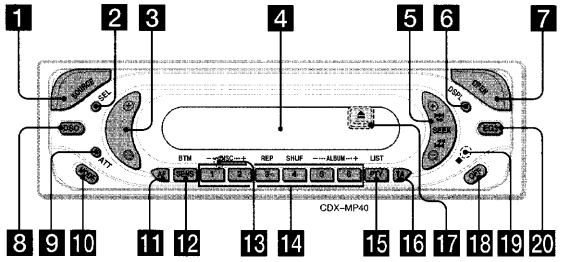


1 SOURCE (Power on/Radio/CD/MD) button
Selecting the source.
2 SEL (select) button
Selecting items.
3 Volume +/– button
4 Display window
5 SEEK +/– button
Radio:
Tuning in stations automatically/finding a station manually.
CD (MP3 files)/MD:
Skipping tracks/fast-forwarding, reversing a track.
6 DSPL (display mode change) button 10, 12, 14, 17
7 OPEN button 9, 11
8 DSO button 21
9 ATT (attenuate) button 19
10 MODE button
Changing the operation.
11 SENS/BTM button 15, 16
12 RESET button (located on the front side of the unit, behind the front panel) 9
13 Number buttons 20
Radio:
Storing the desired station on each number button.
CD/MD:
①: **DISC –** 11
②: **DISC +** 11
③: **REP** 12
④: **SHUF** 13
MP3 files:
⑤: **ALBUM –** 11
⑥: **ALBUM +** 11
14 LIST button 13, 14, 16, 17
15 ⏏ (eject) button (located on the front side of the unit, behind the front panel) 11
16 OFF (Stop/Power off) button*1 9, 11
17 Receptor for the card remote commander
18 EQ3 button 20

*1 **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press and hold (OFF) on the unit until the display disappears.
Otherwise, the display does not turn off and this causes battery drain.

Location of controls (AEP, UK Model)

Refer to the pages listed for details.

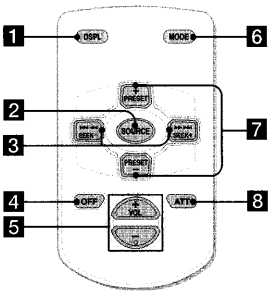


1 SOURCE (Power on/Radio/CD/MD) button
Selecting the source.
2 SEL (select) button
Selecting items.
3 Volume +/– button
4 Display window
5 SEEK +/– button
Radio:
Tuning in stations automatically/finding a station manually.
CD (MP3 files)/MD:
Skipping tracks/fast-forwarding, reversing a track.
6 DSPL (display mode change) button 10, 12, 14, 16
7 OPEN button 9, 11
8 DSO button 23
9 ATT (attenuate) button 22
10 MODE button
Changing the operation.
11 AF button 17, 18
12 SENS/BTM button 15, 16, 18
13 RESET button (located on the front side of the unit, behind the front panel) 9
14 Number buttons 22
Radio:
Storing the desired station on each number button.
CD/MD:
①: **DISC –** 11
②: **DISC +** 11
③: **REP** 12
④: **SHUF** 13
MP3 files:
⑤: **ALBUM –** 11
⑥: **ALBUM +** 11
15 PTY (programme type)/LIST button 13, 14, 19
16 TA button 18
17 ⏏ (eject) button (located on the front side of the unit, behind the front panel) 11
18 OFF (Stop/Power off) button*1 9, 11
19 Receptor for the card remote commander
20 EQ3 button 23

*1 **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press and hold (OFF) on the unit until the display disappears.
Otherwise, the display does not turn off and this causes battery drain.

4

Card remote commander RM-X115



The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 DSPL button
2 SOURCE button
3 SEEK (+/–) buttons
4 OFF button
5 VOL (+/–) buttons
6 MODE button
7 DISC/ALBUM (+/–) buttons
8 ATT button

Note
If the display disappears by pressing (OFF), it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
Refer to "Replacing the lithium battery" for details on how to replace the batteries (page 22).

Selecting a disc and album with the card remote commander

Disc and album can be skipped using the DISC/ALBUM (+/–) buttons on the card remote commander.

(With this unit)

To	Press
Skip albums* – Album selection	+ or – [once for each album] To continuously skip albums, press and hold either button.

(With optional unit)

To	Press
Skip discs – Disc selection	+ or – [once for each disc] To continuously skip discs, press once and press again within 2 seconds (and hold) either button.
Skip albums* – Album selection	+ or – [hold for a moment] and release To continuously skip albums, press (and hold) within 2 seconds of first releasing the button.

** Available only when an MP3 file is played.*

Skipping tracks continuously

Press once (SEEK) (+) or (SEEK) (–) on the card remote commander, then press again within 2 seconds and hold.

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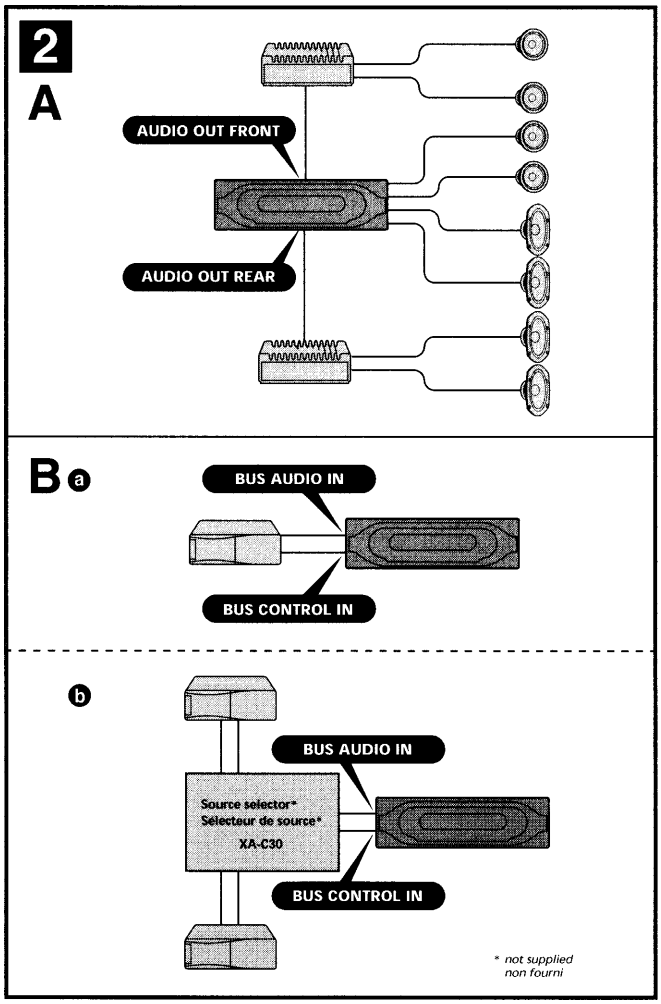
Connections (US, Canadian Model)



Connection example (2)

Notes **(2-A)**

- *Be sure to connect the ground cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

Tip **(2-B-b)**

For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Exemple de raccordement (2)

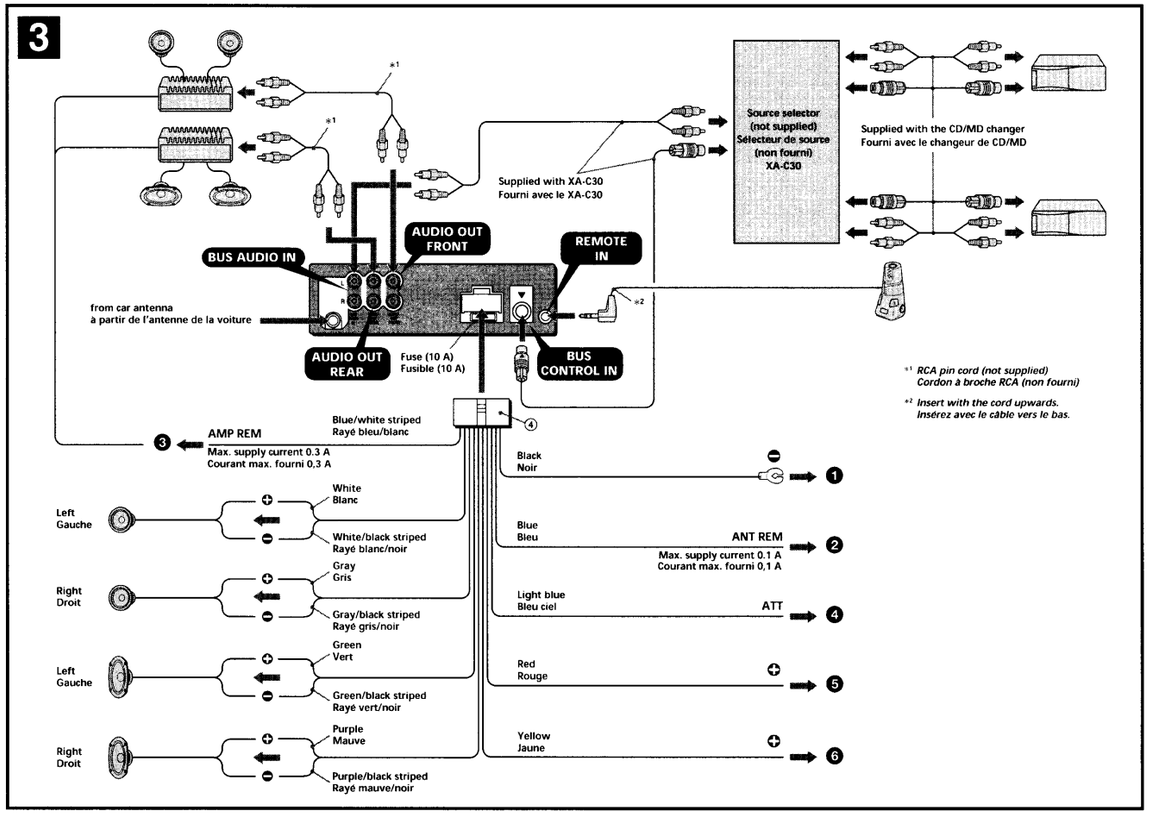
Remarques **(2-A)**

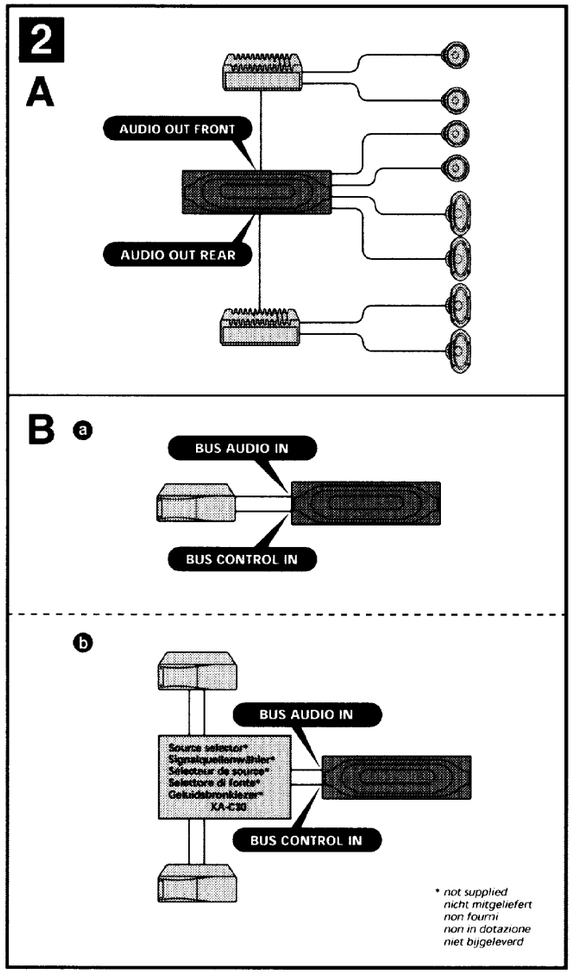
- *Raccordez d'abord le fil de masse avant de raccorder l'amplificateur.*
- *Si vous raccordez un amplificateur de puissance en option et que vous n'utilisez pas l'amplificateur intégré, le bip sonore est désactivé.*

Conseil **(2-B-b)**

Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le sélecteur de source XA-C30 (en option) est requis.

Connections (AEP, UK Model)





Connection example (2)

***Notes* (2-A)**
- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

***Tip* (2-B- b)**
For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Anschlussbeispiel (2)

***Hinweise* (2-A)**
- *Schließen Sie unbedingt zuerst das Massekabel an, bevor Sie den Verstärker anschließen.*
- *Wenn Sie einen gesondert erhältlichen Endverstärker anschließen und den integrierten Verstärker nicht benutzen, wird der Signalton deaktiviert.*

***Tipp* (2-B- b)**
Zum Anschließen von zwei oder mehr CD/MD-Wechslern wird der gesondert erhältliche Signalquellenwähler XA-C30 benötigt .

Exemple de raccordement (2)

***Remarques* (2-A)**
- *Raccordez d'abord le fil de masse avant de connecter l'amplificateur.*
- *Si vous raccordez un amplificateur de puissance en option et que vous n'utilisez pas l'amplificateur intégré, le bip sonore est désactivé.*

***Conseil* (2-B- b)**
Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le selecteur de source XA-C30 (en option) est indispensable.

Esempi di collegamento (2)

***Note* (2-A)**
- *Assicurarsi di collegare il cavo di terra prima di collegare l'apparecchio all'amplificatore.*
- *Se si collega un amplificatore di potenza opzionale e non si utilizza l'amplificatore incorporato, il segnale acustico verrà disattivato.*

***Suggerimento* (2-B- b)**
Per collegare due o più cambia CD/MD, si deve utilizzare il selettore di fonte XA-C30 (opzionale).

Voorbeeldaansluitingen (2)

***Opmerkingen* (2-A)**
- *Sluit eerst de massakabel aan alvorens de versterker aan te sluiten.*
- *Als u een los verkrijgbare vermogensversterker aansluit en de ingebouwde versterker niet gebruikt, is de pieptoon uitgeschakeld.*

***Tip* (2-B- b)**
Om twee of meer CD/MD-wisselaars aan te sluiten, hebt u de geluidsbronkiezer XA-C30 (optioneel) nodig.

Connection diagram (3)

1 To a metal surface of the car
First connect the black ground lead, then connect the yellow and red power input leads.

2 To the power antenna control lead or power supply lead of antenna booster amplifier
Notes
- *It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.*
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

3 To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

4 To the interface cable of a car telephone

5 To the +12 V power terminal which is energized in the accessory position of the ignition key switch
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  Be sure to connect the black ground lead to a metal surface of the car first.
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

6 To the +12 V power terminal which is energized at all times
Be sure to connect the black ground lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Schéma de raccordement (3)

1 À un point métallique de la voiture
Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

2 Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne
Remarques
- *Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir "Remarques sur les fils de commande et d'alimentation".*

3 Au niveau du AMP REMOTE IN de l'amplificateur de puissance en option
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

4 Vers le cordon de liaison d'un téléphone de voiture

5 À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires
Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le fil de masse noir à un point métallique de la voiture.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir "Remarques sur les fils de commande et d'alimentation".*

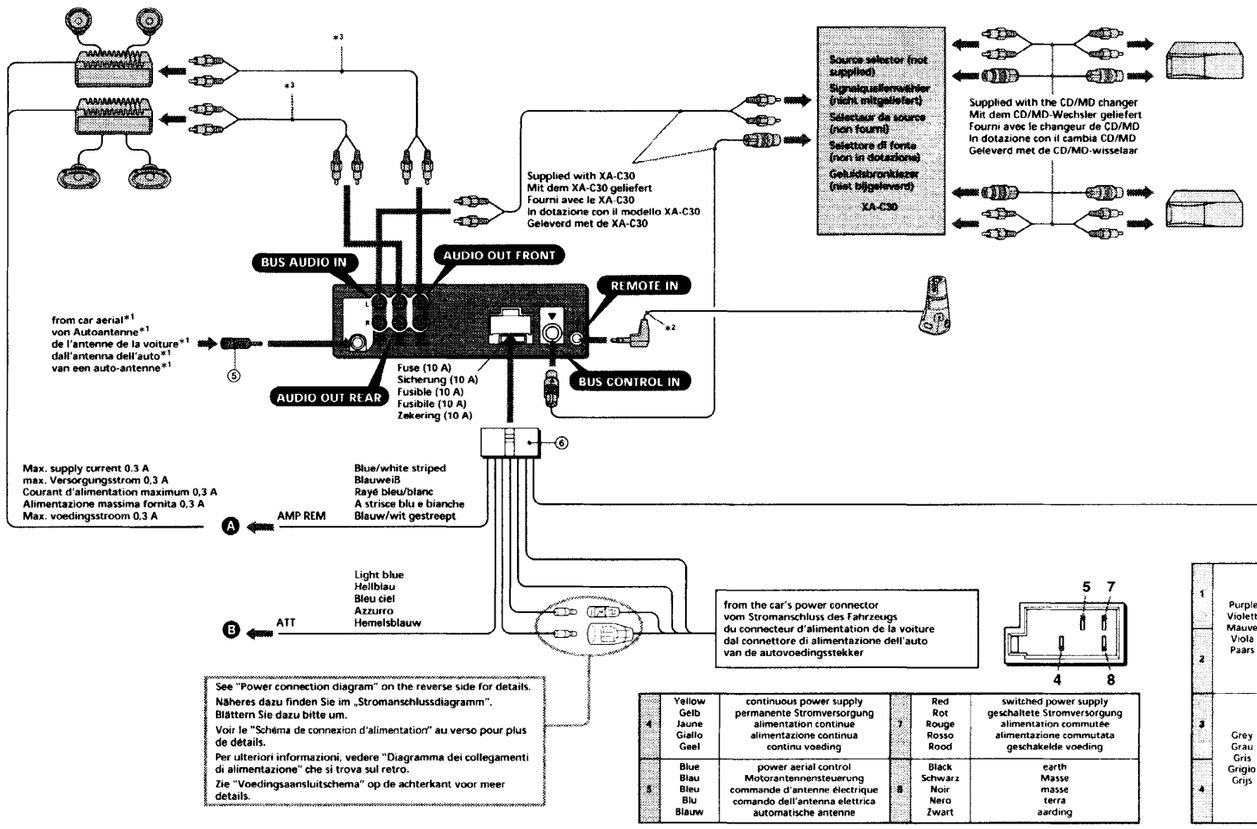
6 À la borne +12 V qui est alimentée en permanence
Raccordez d'abord le fil de masse noir à un point métallique de la voiture.

Remarques sur les fils de commande et d'alimentation
- *Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de + 12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez la sortie de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) à la borne de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8ohms avec une capacité électrique adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleur au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) de l'enceinte.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

3



4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	7	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
5	Blue Blau Bleu Blu Blauw	power aerial control Motorantennensteuerung commande d'antenne électrique comando dell'antenna elettrica automatische antenne	8	Black Schwarz Noir Nero Zwart	earth Masse masse terra aarding

Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

1	Purple Violett Mauve Violà Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.

1 **Note for the aerial connecting*
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor ⑤ to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
2 **Insert with the cord upwards*
3 **RCA pin cord (not supplied)*

1 **Hinweis zum Anschließen der Antenne*
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters ⑤ an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
2 **Mit dem Kabel nach oben einsetzen*
3 **Cinchkabel (nicht mitgeliefert)*

1 **Remarque sur le raccordement de l'antenne*
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni ⑤ pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
2 **Insérez avec le câble vers le haut*
3 **Cordon à broche RCA (non fourni)*

1 **Nota per il collegamento dell'antenna*
Se l'antenna dell'auto è di tipo ISO (International Organization Standardization), utilizzare l'adattatore ⑤ in dotazione per collegarla.
Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
2 **Inserire con il cavo rivolto verso l'alto*
3 **Cavo a piedini RCA (non in dotazione)*

1 **Opmerking bij de antenne-aansluiting*
Indien uw auto is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adapter ⑤.
Sluit eerst de auto-antenne aan op de meegeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.
2 **Plaatsen met het snoer naar boven*
3 **Tulpstekkersnoer (niet bijgeleverd)*

Connection diagram (3)

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

Ⓑ **To the interface cable of a car telephone**

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord ⑥ may damage the aerial.

Notes on the control leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Anschlussdiagramm (3)

Ⓐ **An AMP REMOTE IN des gesondert erhältlichen Endverstärkers**
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

Ⓑ **An Schnittstellenkabel eines Autotelefons**

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel ⑥ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Schéma de connexion (3)

Ⓐ **Au niveau du AMP REMOTE IN d'un amplificateur de puissance en option**
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil

Ⓑ **Vers le câble d'interface d'un téléphone de voiture**

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ⑥ risque d'endommager l'antenne.

Remarques sur les fils de commande
- *Le fil de commande (bleu) fournit du courant continu de +12 V lorsque vous allumez le sélecteur de canaux ou lorsque vous activez la fonction TA (messages de radioguidage) en AF (fréquence alternative).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW/LW intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) à la borne de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur la connexion des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas raccorder le câble de masse de cet appareil à la borne negative (–) du haut-parleur.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager l'appareil. Veiller à raccorder des enceintes passives uniquement.*
- *Pour éviter tout dysfonctionnement, ne pas utiliser pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne pas raccorder entre eux les cordons des haut-parleurs de l'appareil.*

Schema di collegamento (3)

Ⓐ **A AMP REMOTE IN di un amplificatore di potenza opzionale**
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.

Ⓑ **Al cavo di interfaccia di un telefono per auto**

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione ⑥, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola a relè.

Note sui cavi di controllo
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore o le funzioni TA (notiziario sul traffico) e AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione opzionale al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, onde evitare che vengano danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Aansluitschema (3)

Ⓐ **Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker**
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.

Ⓑ **Naar het interface-snoer van een autotelefoon**

Opgelet

Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer ⑥ de antenne beschadigen.

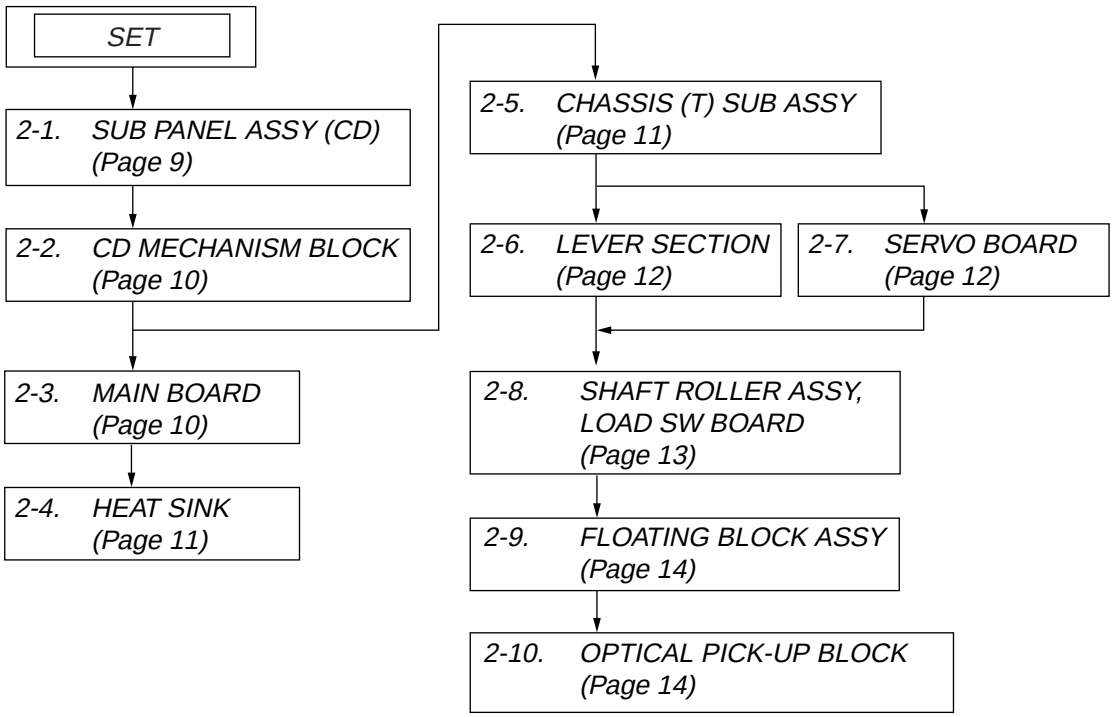
Opmerking betreffende de aansluitsnoeren
- *De antennevoedingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner aanschakelt of de AF (Alternative Frequency), TA (Traffic Announcement) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/voorruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.*

Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Verbind de massakabel van dit toestel niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter en linker luidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

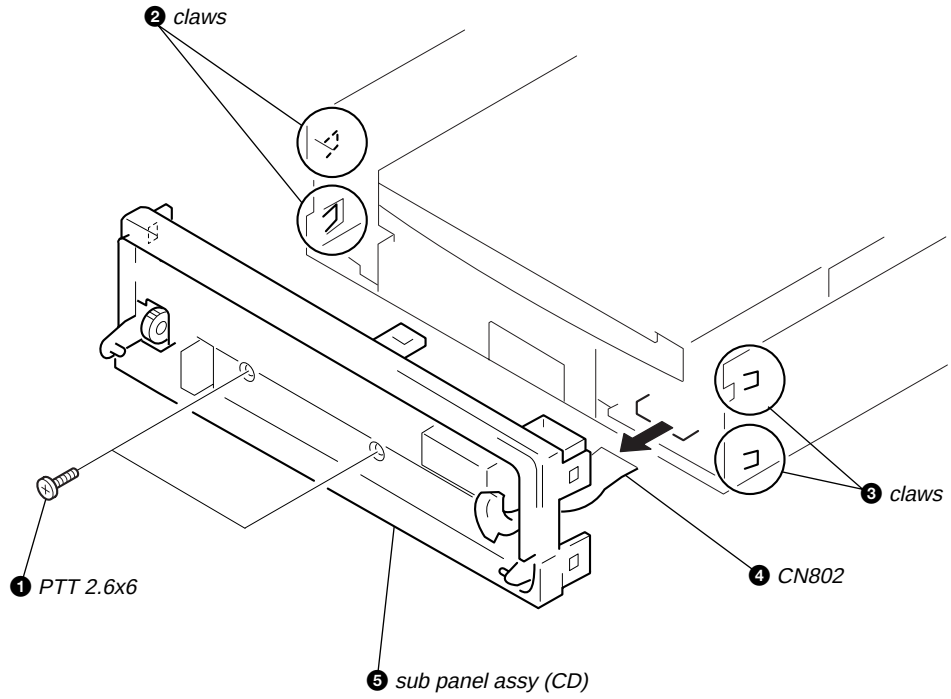
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

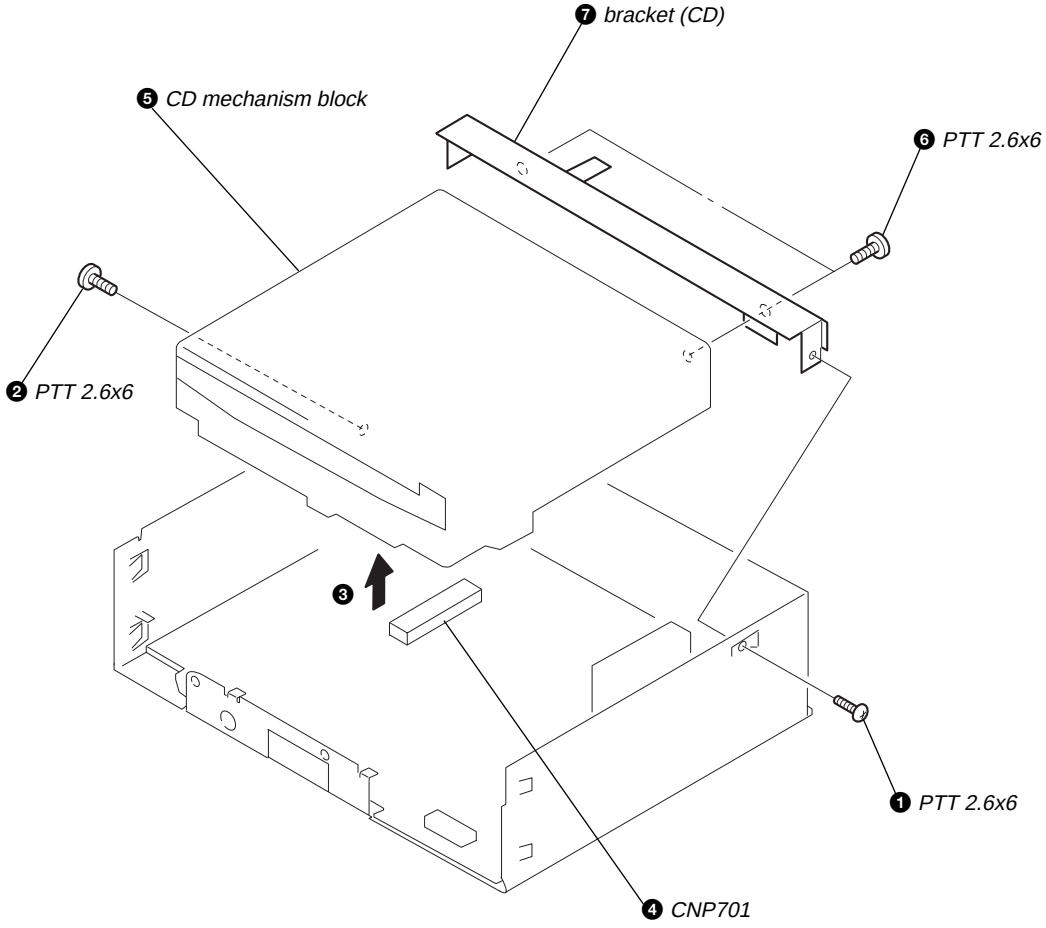


Note : Follow the disassembly procedure in the numerical order given.

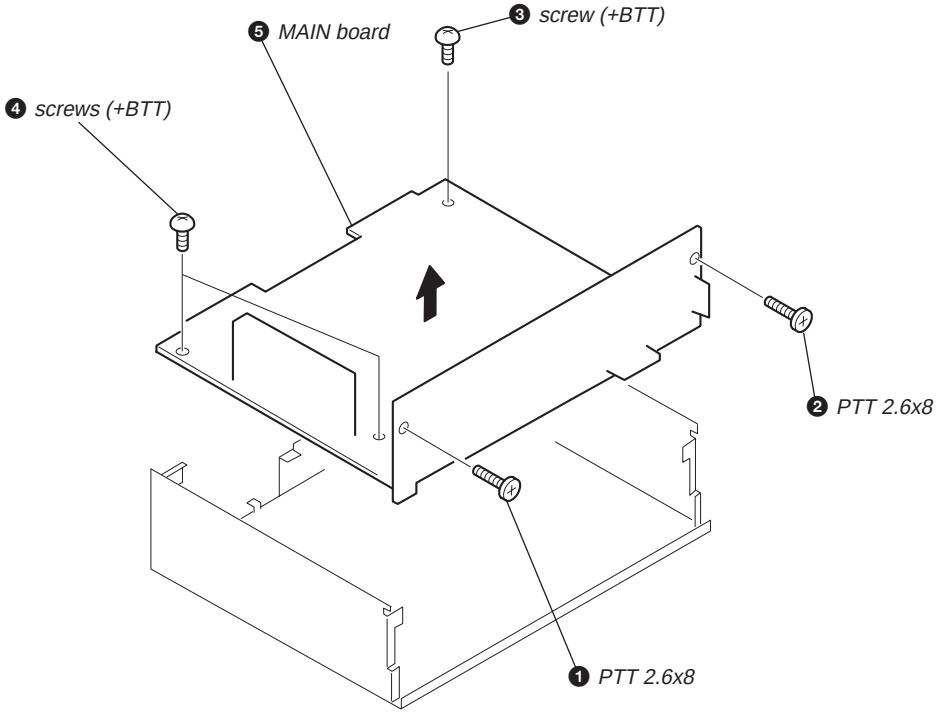
2-1. SUB PANEL ASSY (CD)



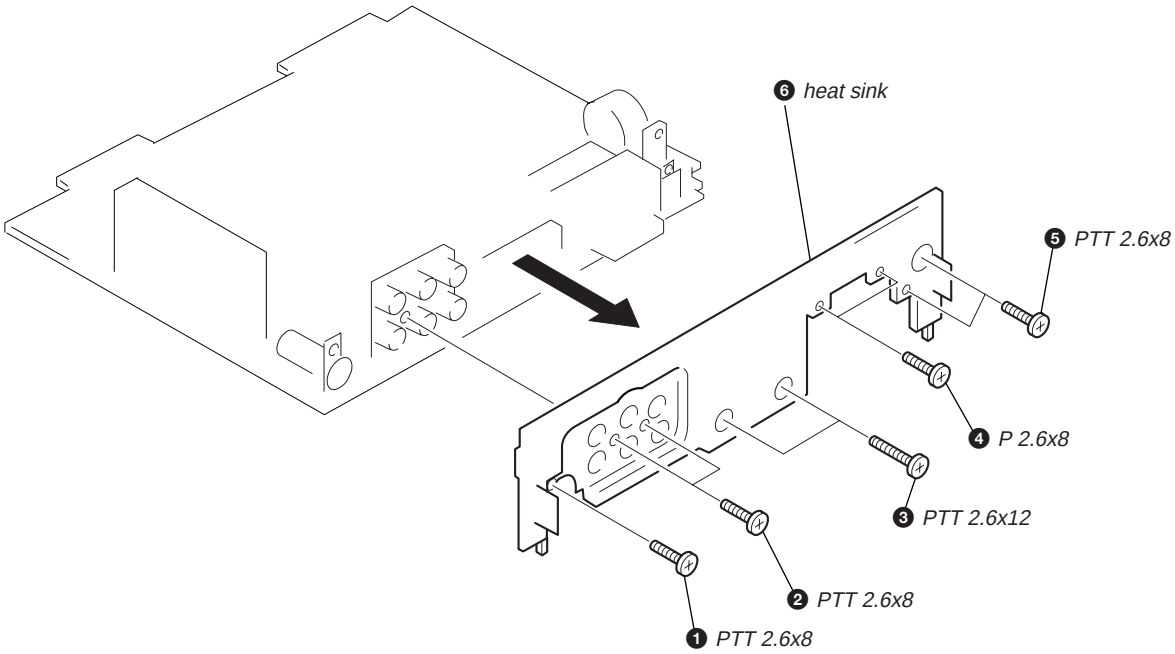
2-2. CD MECHANISM BLOCK



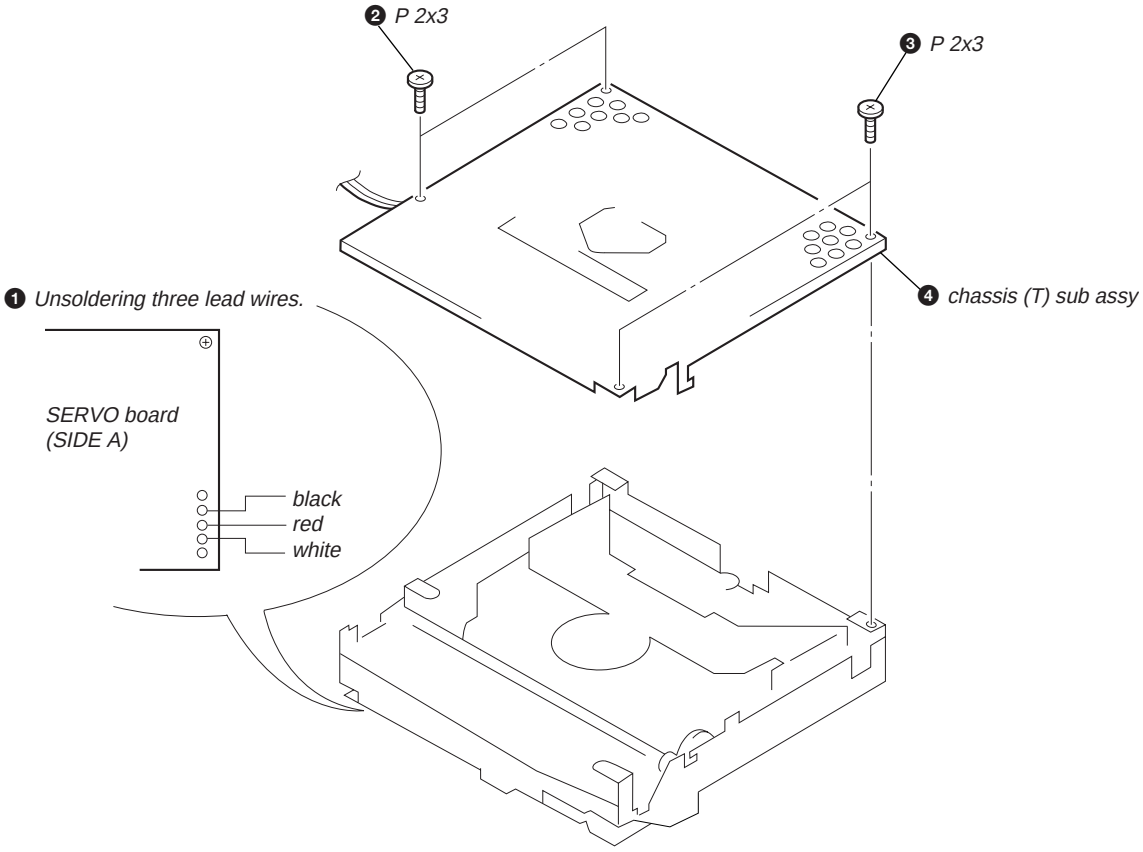
2-3. MAIN BOARD



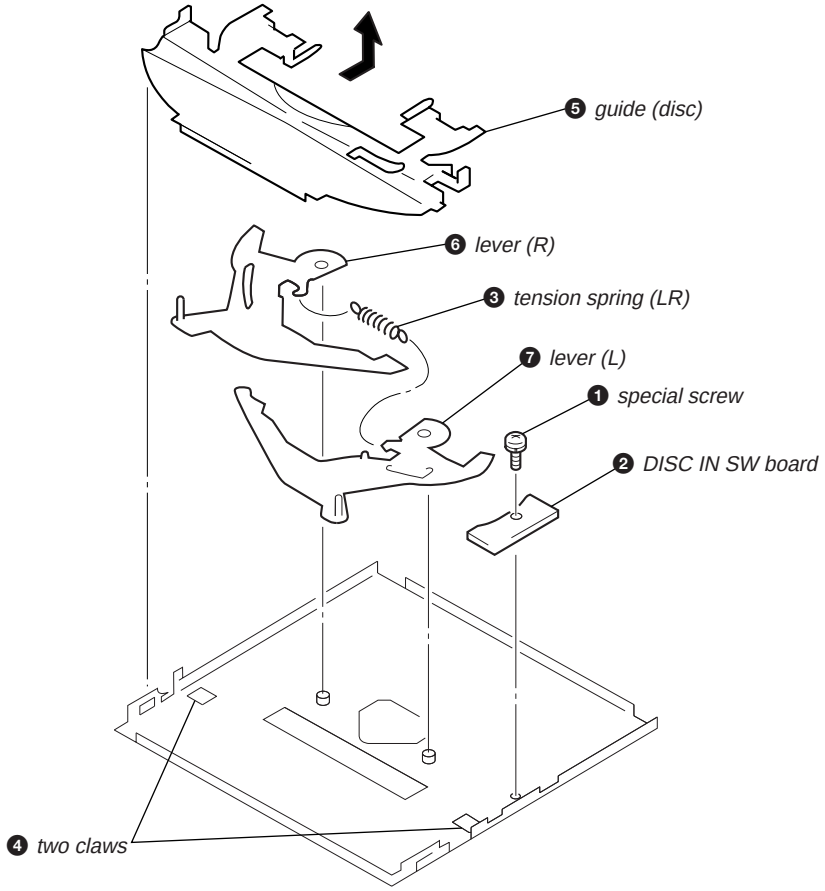
2-4. HEAT SINK



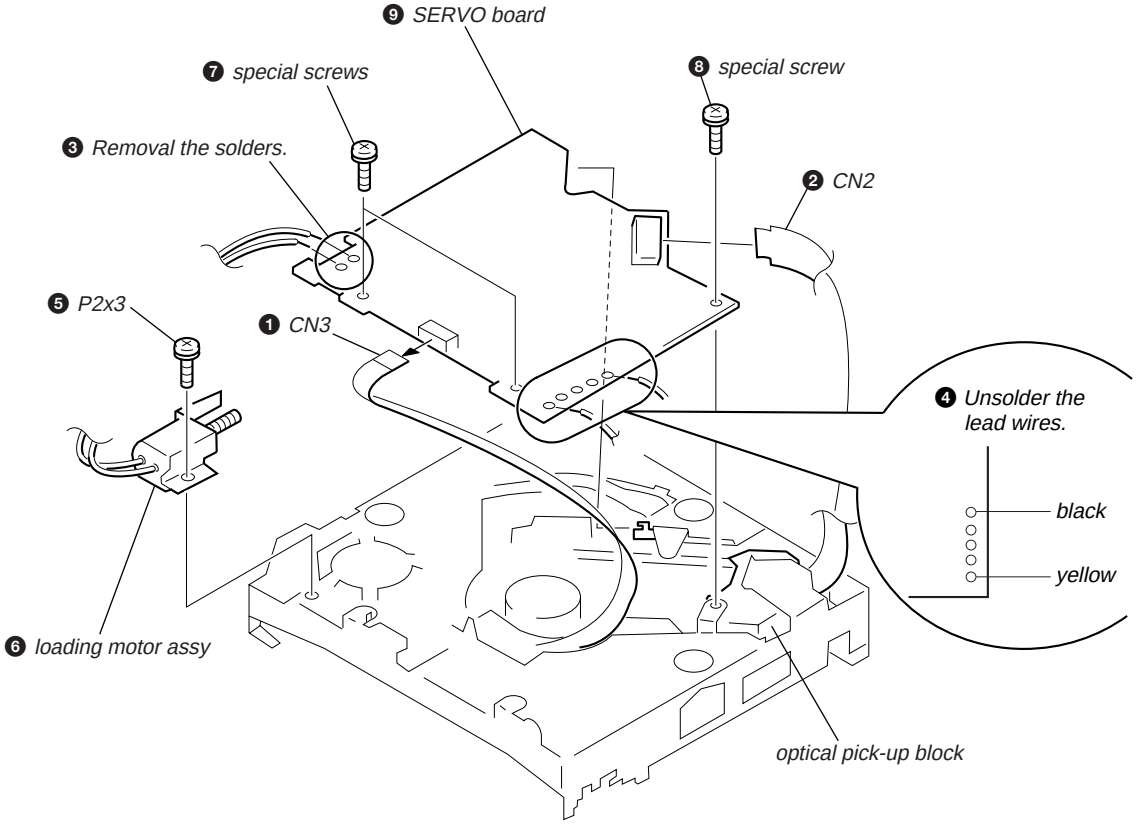
2-5. CHASSIS (T) SUB ASSY



2-6. LEVER SECTION



2-7. SERVO BOARD



2-8. SHAFT ROLLER ASSY, LOAD SW BOARD

• When installing, take note of the positions arm (roller) and washers. (Fig. 1)

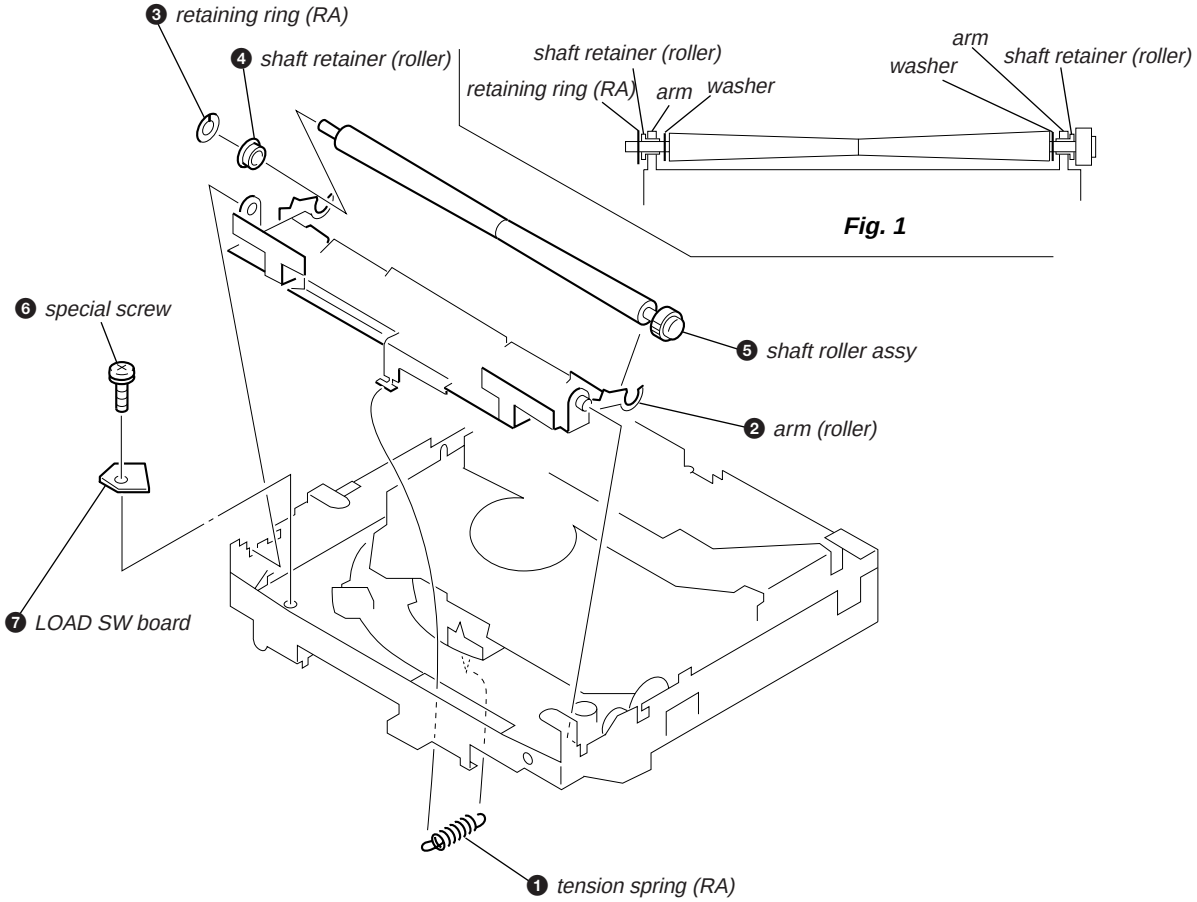
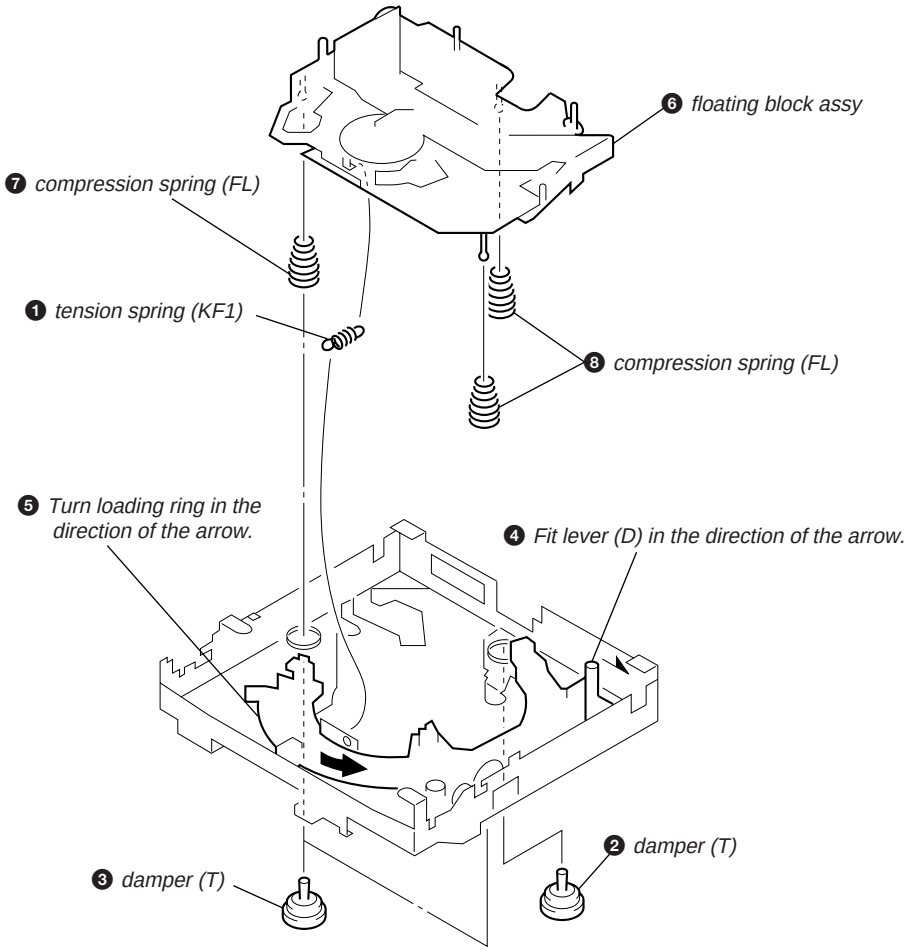
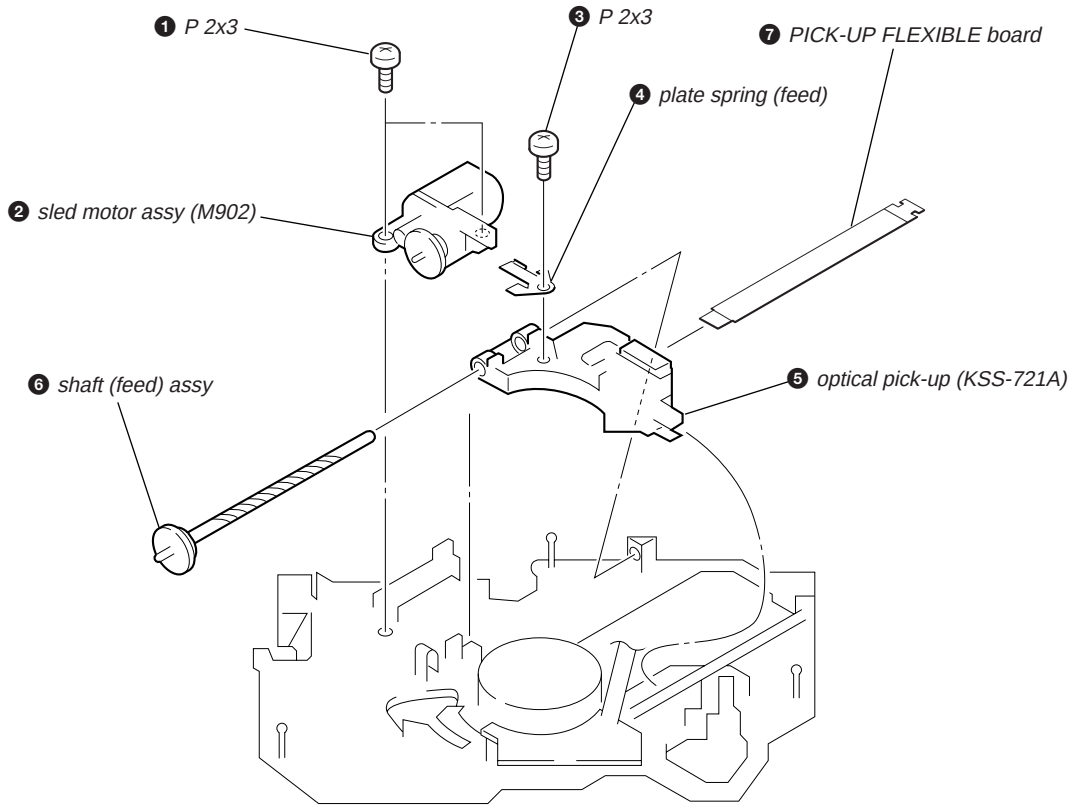


Fig. 1

2-9. FLOATING BLOCK ASSY



2-10. OPTICAL PICK-UP BLOCK



SECTION 3
DIAGRAMS

3-1. IC PIN DESCRIPTIONS

• IC3 HD6432238RWN35TEI (CD MASTER CONTROL) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	$\overline{\text{TEST}}$	I	Test mode selection pin Not used. (Open)
2	DECXRST	O	Reset signal output to the DSP IC "L": reset
3	DECSTBY	O	Standby mode control signal output to the DSP IC "H": standby
4 – 7	NC	O	Not used. (Open)
8	PH3	I	CD PH3 photo sensor detection signal input Not used. (Open)
9	INSW/PH2	I	CD mechanism disc in switch detection signal input
10	$\overline{\text{LIMIT\_SW}}$	I	CD mechanism in-limit switch detection signal input
11	$\overline{\text{D\_SW}}$	I	CD mechanism down switch detection signal input
12	CVCC	—	System power supply pin (+3.3 V)
13	NC	O	Not used. (Open)
14	VSS	—	Ground pin
15	NC	O	Not used. (Open)
16	$\overline{\text{PH1}}$	I	CD PH1 photo sensor detection signal input Not used. (Open)
17	EJECT	O	CD mechanism loading motor control signal output (eject operation)
18	LOAD	O	CD mechanism loading motor control signal output (load operation)
19 – 26	NC	O	Not used. (Open)
27	FLAG	I	Correction unable detection signal input
28	RFOK	I	RFOK signal input from the servo IC
29, 30	NC	O	Not used. (Open)
31	TXD	O	UART TXD PC connection output Not used. (Open)
32	RXD	I	UART RXD PC connection input Not used. (Open)
33	XTALEN	O	Crystal oscillation control signal output to the servo IC
34	TSTB	O	CD text parameter strobe signal output to the servo IC
35	STB	O	Data strobe signal output to the servo IC
36	A0	O	Command/parameter identification signal output to the servo IC "L": command, "H": parameter
37	CD_RST	O	Reset signal output to the servo IC
38	$\overline{\text{PACK}}$	I	CD text pack sync signal input from the servo IC
39	NC	O	Not used. (Open)
40	$\overline{\text{SELF\_SW}}$	I	CD mechanism self load position detection switch signal input
41	NC	O	Not used. (Open)
42	AVSS	—	Ground for A/D converter
43, 44	NC	O	Not used. (Open)
45, 46	NC	I	Not used. (Open)
47	KEY0	I	Key switch signal input in the test mode Not used. (Open)
48	KEY1	I	Mode switch signal input in the test mode Not used. (Open)
49 – 52	NC	I	Not used. (Open)
53	AVREF	—	Reference voltage for A/D converter
54	AVCC	—	Power supply for A/D converter
55	MD0	—	CPU operation mode setting pin Connecting to +3.3 V in this set.
56	MD1	—	CPU operation mode setting pin Connecting to +3.3 V in this set.
57	X1A	—	Sub clock oscillator terminal Not used. (Open)
58	X0A	—	Sub clock oscillator terminal Not used. (Open)
59	RSTX	I	Microcomputer reset signal input
60	NMI	—	Not used. (Fixed at "H")
61	STBY	—	Not used. (Fixed at "H")
62	VCC	—	Power supply pin (+3.3 V)
63	XTAL	—	Main clock oscillator pin (12.288 MHz)
64	VSS	—	Ground pin
65	XTEAL	—	Main clock oscillator pin (12.288 MHz)
66	FWE	I	Flash write enable signal input

Pin No.	Pin Name	I/O	Pin Description
67	MD2	—	CPU operation mode setting pin
68	$\overline{\text{FL\_BOOT}}$	I	Flash write selection signal input (“L”: flash write mode)
69	FL_W	O	Flash write control signal output connected to pin 66 (FWE)
70	NC	O	Not used. (Open)
71	CDMON	O	CD mechanism power supply control signal output
72	DECINT	I	Interrupt signal input from the DSP IC
73	CLOSE	O	Front panel operation request output (Close)
74	OPEN	O	Front panel oparation request output (Open)
75	LINKOFF	O	LINK OFF signal output for UNI_LINK “H”: link off, “L”: link on
76	UNI_SO	O	Sony-Bus serial data output to the bus interface
77	UNI_SI	I	Sony-Bus serial data input from the bus interface
78	UNI_CK	I	Sony-Bus serial clock input from the bus interface
79	NC	O	Not used. (Open)
80	SDA	I/O	I2C interface data input/output
81	SCL	O	I2C interface clock output
82	NC	O	Not used. (Open)
83	TSO	O	Serial data output to the servo IC
84	TSI	I	Serial data input from the servo IC
85	TSCK	O	Serial clock output to the servo IC
86	LEDDAT	O	LED data output for the jig
87	LEDCLK	O	LED clock output for the jig
88	LEDLAT	O	LED latch signal output for the jig
89, 90	NC	O	Not used. (Open)
91	$\overline{\text{BUSON}}$	I	Sony-Bus BUS ON signal input from the bus interface
92	$\overline{\text{BUCHK}}$	I	Back up power supply detection signal input
93	A-ATT	O	Audio muting control signal output
94	CDON	O	Power control signal output for the CD servo “H”: servo on, “L”: during loading
95	NC	O	Not used. (Open)
96	U/J_SEL	I	Destination setting pin
97	$\overline{\text{TEXTSEL}}$	I	CD text function setting pin
98	NC	O	Not used. (Open)
99	$\overline{\text{CFSEL}}$	I	Custom file function setting pin
100	DOUT SEL	I	Digital output selection setting pin “H”: digital output available

• IC5 CXD9684R-005 (DSP) (SERVO BOARD)

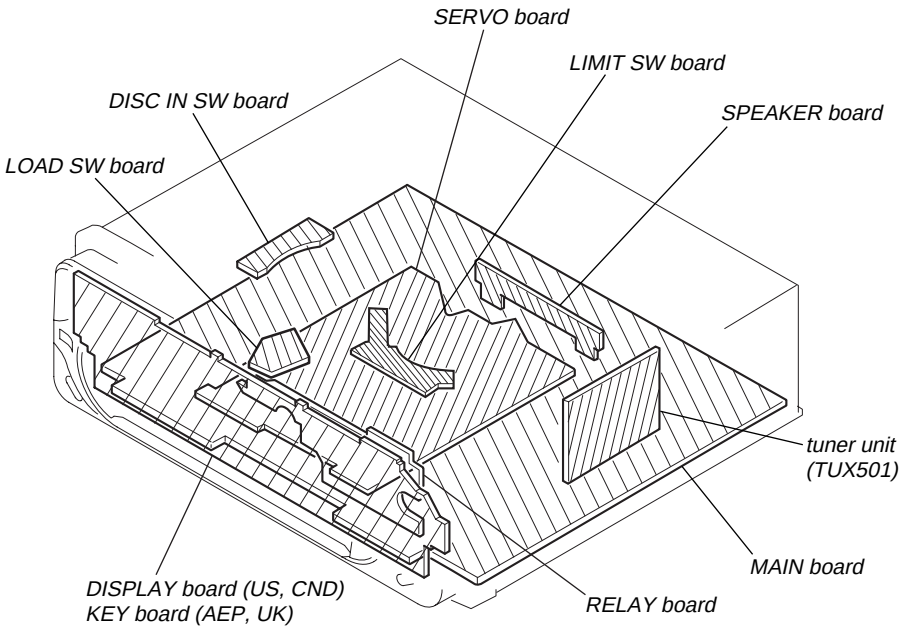
Pin No.	Pin Name	I/O	Pin Description
1	/RESET	I	Reset input pin "L": reset
2	MIMD	I	Microcomputer interface mode selection input "H": I2C, "L": TSB
3, 4	AD0, AD1	O	External SRAM address signal output
5	MIDIO (I2C_SDA)	I/O	Serial data input/output
6	MICK (I2C_SCL)	I	Serial clock input
7	AD2	O	External SRAM address signal output
8	VDDT (3.3V)	—	Power supply (3.3 V) for digital circuit
9	SDO	O	Data output
10, 11	AD3, AD4	O	External SRAM address signal output
12	SDI0	I	Data input 0
13	BCKIA	I	Bit clock input A
14	LRCKIA	I	LR clock input A
15	AD5	O	External SRAM address signal output
16	CE	O	External SRAM chip enable signal output
17	OE	O	External SRAM output enable signal output
18	VDD (2.5V)	—	Power supply pin (2.5 V) for digital circuit
19	STANDBY	I	Standby mode control signal input "H": STB, "L": normal
20	VSS (2.5VGND)	—	Ground pin for digital circuit
21	VSSL (2.5VGND)	—	Ground pin for DAC Lch
22	VRAL	—	Reference voltage pin for DAC Lch
23	LO	O	DAC Lch signal output (Open)
24	VDAL (2.5V)	—	Power supply pin (2.5 V) for DAC Lch
25	VDAR (2.5V)	—	Power supply pin (2.5 V) for DAC Rch
26	RO	O	DAC Rch signal output (Open)
27	VRAR	—	Reference voltage pin for DAC Rch
28	VSSR (2.5VGND)	—	Ground pin for DAC Rch
29	TESTP	I	Pin for test "H": test mode, "L": normal (fixed at "L")
30	CKS	I	VCO selection input "H": VCO, "L": X1 input
31 – 34	AD12 to AD9	O	External SRAM address signal output
35	VDDT (3.3V)	—	Power supply pin (3.3 V) for digital circuit
36 – 38	AD8 to AD6	O	External SRAM address signal output
39	REQ	O	Interrupt request signal output to the CD master control
40	VSS	—	Ground pin for digital circuit
41, 42	AD13, AD14	O	External SRAM address signal output
43	WR	O	External SRAM write signal output
44, 45	AD16, AD15	O	External SRAM address signal output
46, 47	IO0, IO1	I/O	External SRAM data input/output
48	VSS	—	Ground pin for digital circuit
49 – 51	IO2 to IO4	I/O	External SRAM data input/output
52	VDD (2.5V)	—	Power supply pin (2.5 V) for digital circuit
53 – 55	IO5 to IO7	I/O	External SRAM data input/output
56	VSSP	—	Ground pin for VCO circuit
57	PDO	O	PLL phase error detection signal output
58	VCOI	I	VCO control voltage input
59	VDDP	—	Power supply pin for VCO circuit
60	XRDE	I/O	External clock input, audio clock output Not used. (Open)
61	VDDX (2.5V)	—	Power supply pin for oscillation circuit
62	XI	I	Resonator pin
63	XO	O	Resonator pin
64	VSSX	—	Ground pin for oscillation circuit

• IC801 MN101C49KSJ (SYSTEM CONTROL) (MAIN BOARD)

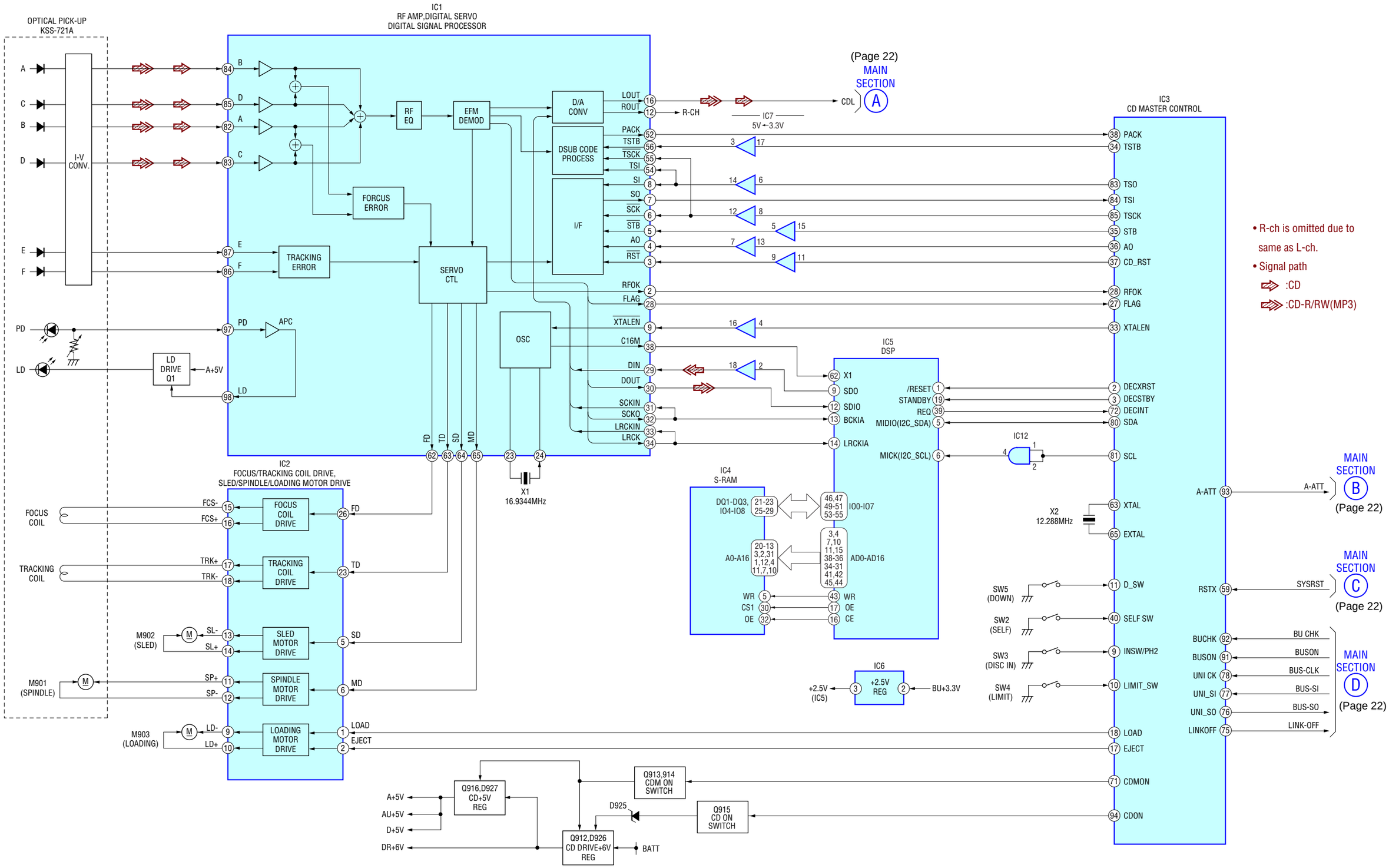
Pin No.	Pin Name	I/O	Pin Description
1	VREF–	—	Power supply pin for A/D converter
2	VSM	I	S-meter voltage detection signal input from the tuner unit (TU601)
3	NIL	I	Not used. (Connected to ground.)
4	KEYIN1	I	Key signal input
5	KEYIN0	I	Key signal input
6	RC_IN0	I	Rotary commander key signal input from the remote-in jack
7	QUALITY	I	Noise detection signal input (AEP, UK model)/Connected to ground. (US, Canadian model)
8	DST SEL	I	Destination setting pin (US, Canadian model)
9	NIL	I	Not used. (Connected to ground.)
10	VREF+	—	Power supply pin for A/D converter
11	VDD	—	Power supply pin
12	OSCOUT	O	High speed clock output (18.43 MHz)
13	OSCIN	I	High speed clock input (18.43 MHz)
14	VSS	—	Ground pin
15	XIN	I	Low speed clock input (32.768 kHz)
16	XOUT	O	Low speed clock output (32.768 kHz)
17	MMOD	—	Memory mode selection input “L”: single chip mode (connected to ground)
18	LCDSO	O	Serial data output to the LCD driver
19	LCDCE	O	Chip enable signal output to the LCD driver
20	LCDCKO	O	Serial clock output to the LCD driver
21 – 23	NCO	O	Not used. (Open)
24	$\overline{\text{SYSRST}}$	O	System reset signal output
25	$\overline{\text{BUSON}}$	O	Bus on signal output to the bus interface
26	KEYACK	I	Key acknowledge detection signal input
27	DAVN (NIL)	I	RDS data block sync detection signal input (AEP, UK model)/Connected to ground. (US, Canadian model)
28	BU_IN	I	Back up power supply detection signal input
29	SIRCS	I	Remote control signal input from the remote control receiver
30	TUATT IN	I	ATT control signal input from tuner unit.
31	NIL	I	Not used. (Connected to ground.)
32	NIH	I	Not used. (Connected to power supply.)
33	$\overline{\text{RESET}}$	I	Microcomputer reset signal input from the reset IC
34	$\overline{\text{NOSE SW}}$	I	Front panel with/without detection signal input “L”: panel with
35	BEEP	O	Beep signal output to the power amplifier
36	NCO	O	Not used. (Open)
37	$\overline{\text{TESTIN}}$	I	Test mode detection signal input
38	$\overline{\text{ACCIN}}$	I	Accessory power supply detection signal input
39	NCO	O	Not used. (Open)
40	TELATT	I	TEL ATT detection signal input
41	NIH	I	Fixed at “H”.
42	BUSSO	O	Sony_Bus serial data output to the bus interface IC
43	BUSSI	I	Sony_Bus serial data input from the bus interface IC
44	BUSCKO	O	Sony_Bus serial clock output to the bus interface IC
45	I2CSIO	I/O	I2C bus serial data input/output
46	NCO	O	Not used. (Open)
47	I2CCKO	O	I2C bus serial clock output
48	NCO	O	Not used. (Open)
49	NCO	O	Not used. (Open)
50	POW_ON	O	System power supply control signal output
51 – 66	NCO	O	Not used. (Open)
67	ATT	O	System ATT control signal output
68	NCO	O	Not used. (Open)

Pin No.	Pin Name	I/O	Pin Description
69	TU ON	O	Tuner power supply control signal output
70	$\overline{\text{VOLATT}}$	O	Electronic volume ATT control signal output to the electronic volume
71	NCO	O	Not used. (Open)
72	AMPON	O	Power amplifier standby control signal output to the power amplifier
73	NCO	O	Not used. (Open)
74	AMPATT	O	Power amplifier ATT control signal output to the power amplifier
75	DOORIND	O	Sub panel power supply control signal output
76 – 84	NCO	O	Not used. (Open)
85	NS MASK	O	Noise mask signal output
86	EE_CKO	O	EEPROM serial clock output
87	EE_SIO	I/O	EEPROM serial data input/output
88	TUATT	O	Tuner ATT signal output to the tuner unit
89, 90	NCO	O	Not used. (Open)
91	$\overline{\text{XKEYON}}$	O	Power supply control signal to the function key
92	ILL ON	O	Illumination power supply control signal output
93	NCO	O	Not used. (Open)
94	$\overline{\text{DOORSW}}$	I	Front panel open/close detection signal input “L”: close, “H”: open
95	DAVSS	—	Ground pin for D/A converter
96	NCO	O	Not used. (Open)
97	$\overline{\text{FLASH W}}$	I	Flash write detection signal input
98	$\overline{\text{RC\_IN1}}$	I	Remote commander shift key signal input from the remote-in jack “L”: shift key on
99	NCO	O	Not used. (Connected to ground.)
100	DAVDD	—	Power supply pin for D/A converter

3-2. CIRCUIT BOARDS LOCATION

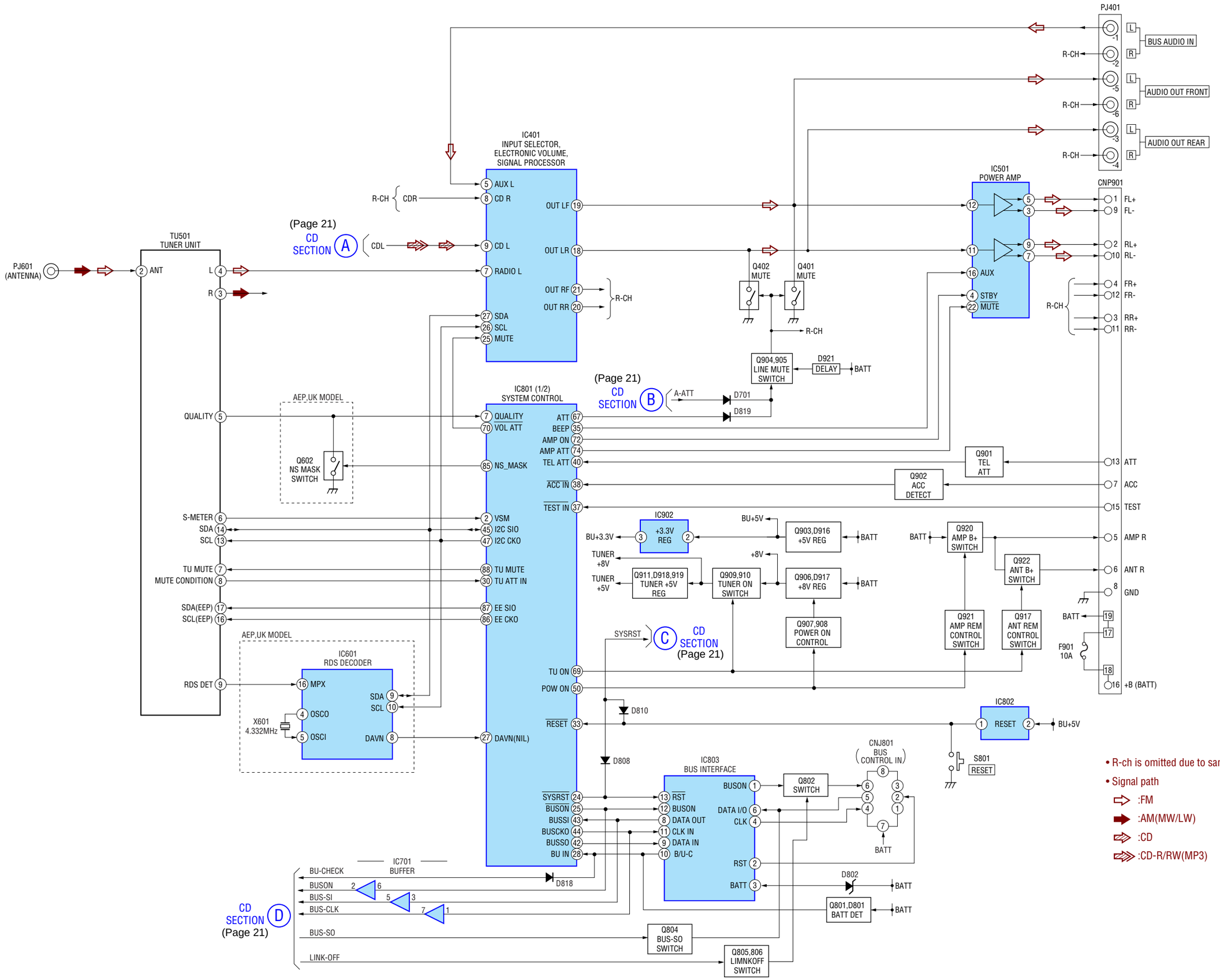


3-3. BLOCK DIAGRAM — CD SECTION —



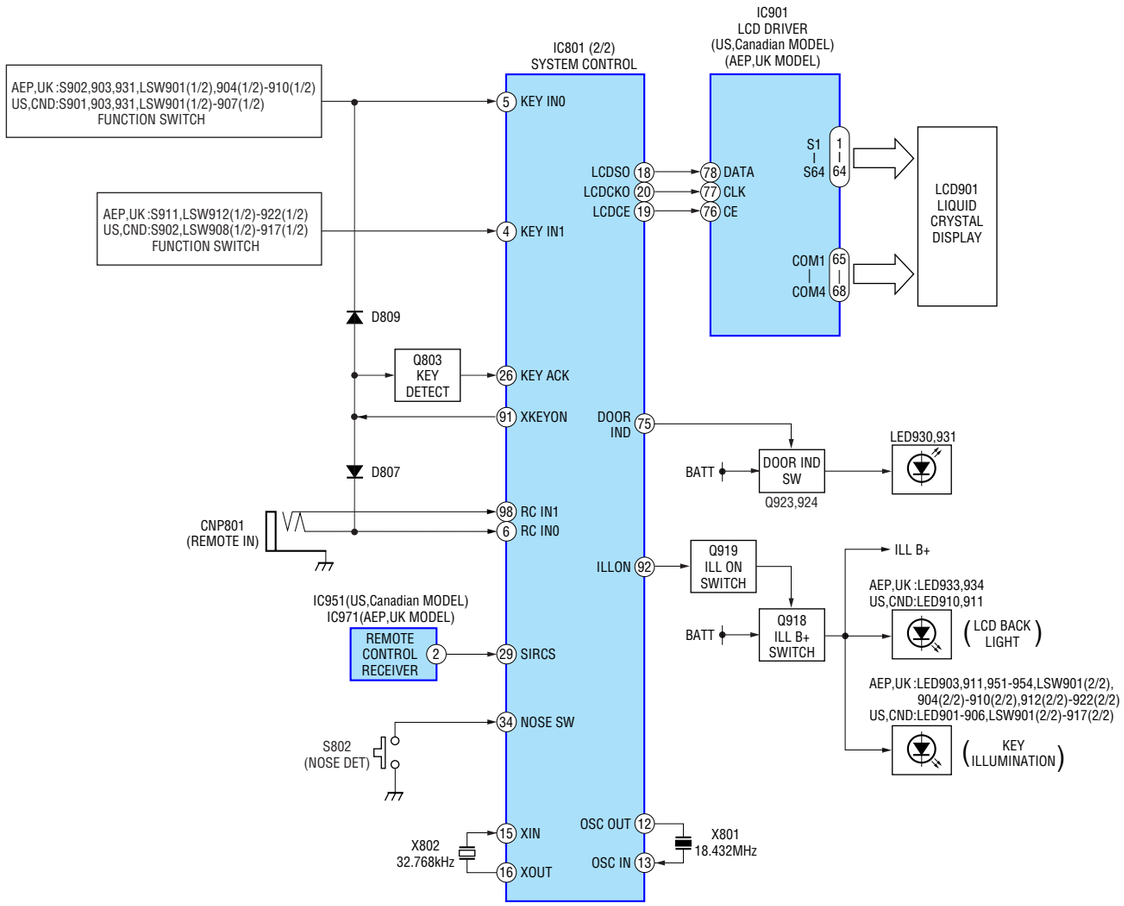
- R-ch is omitted due to same as L-ch.
- Signal path
  - ⇨ :CD
  - ⇨ :CD-R/RW(MP3)

3-4. BLOCK DIAGRAM — MAIN SECTION —



- R-ch is omitted due to same as L-ch.
- Signal path
  - :FM
  - :AM(MW/LW)
  - :CD
  - :CD-R/RW(MP3)

3-5. BLOCK DIAGRAM — DISPLAY SECTION —



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : AM/MW/LW
  - ⇨ : CD
  - ⇨ : CD-R/RW (MP3)

for printed wiring boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

• Waveforms

— SERVO Board —

(MODE: CD PLAY)

① 1V/DIV,20ns/DIV
59 ns, 2.8 Vp-p
IC1 ㉓ (XTAL)

② 500mV/DIV,1µs/DIV
1.7 Vp-p
IC1 ㊼ (RFO)

③ 100mV/DIV,20µs/DIV
Approx. 200m Vp-p
IC1 ㊶ (FEO)

④ 100mV/DIV,20µs/DIV
Approx. 300m Vp-p
IC1 ㊸ (TEO)

⑤ 1V/DIV,40ns/DIV
82 ns, 1.2 Vp-p
IC3 ㊸ (XTAL)

— MAIN Board —

⑥ 2V/DIV,100ns/DIV
230 ns, 5.5 Vp-p
IC601 ④ (OSCD)

⑦ 2V/DIV,40ns/DIV
54 ns, 3.2 Vp-p
IC801 ⑫ (OSCOUT)

⑧ 2V/DIV,20µs/DIV
30.5 µs, 3.8 Vp-p
IC801 ⑯ (XOUT)

3-6. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 20 for Circuit Boards Location.

14 13 12 11 10 9 8 7 6 5 4 3 2 1

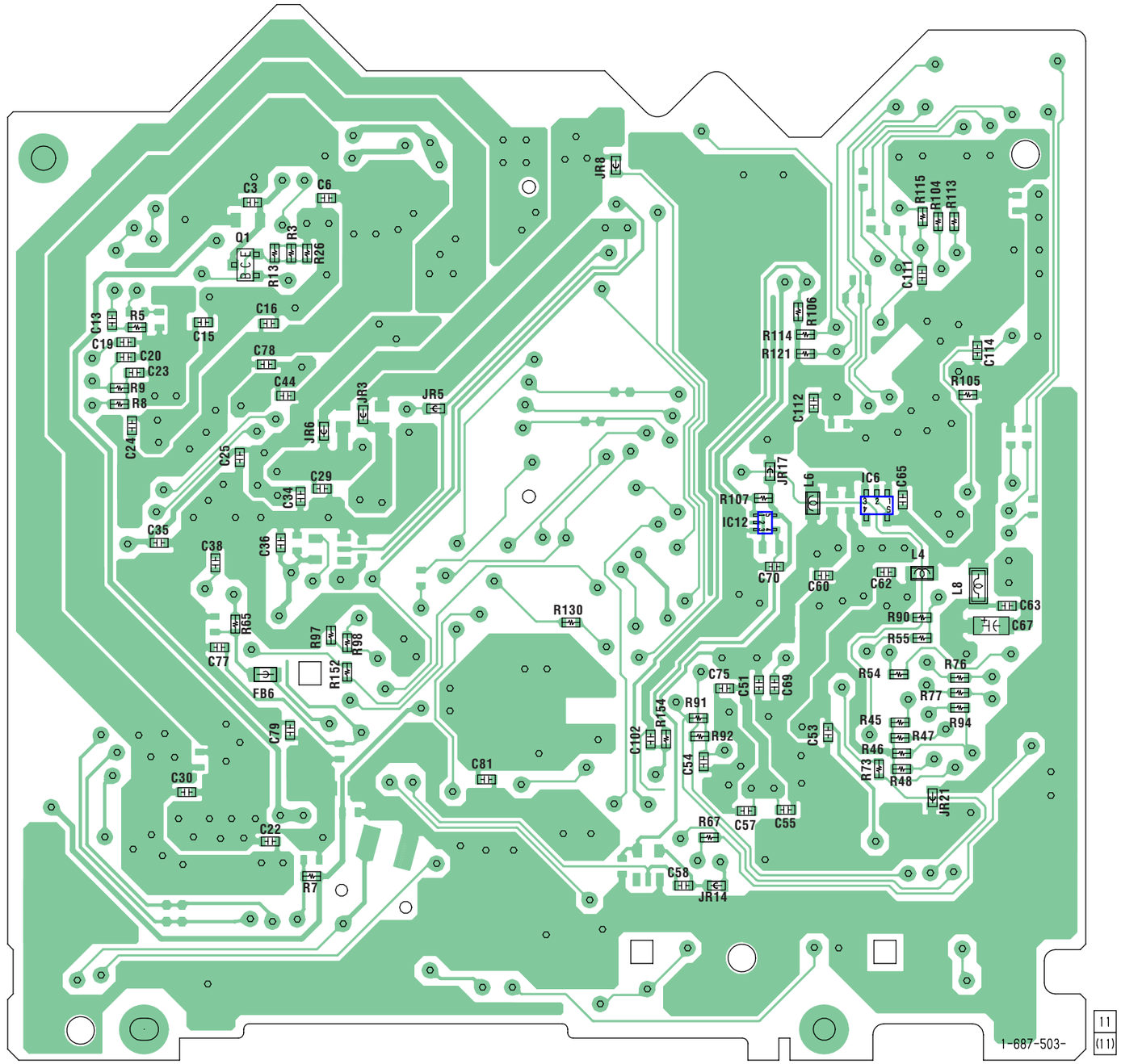
A B C D E F G H I

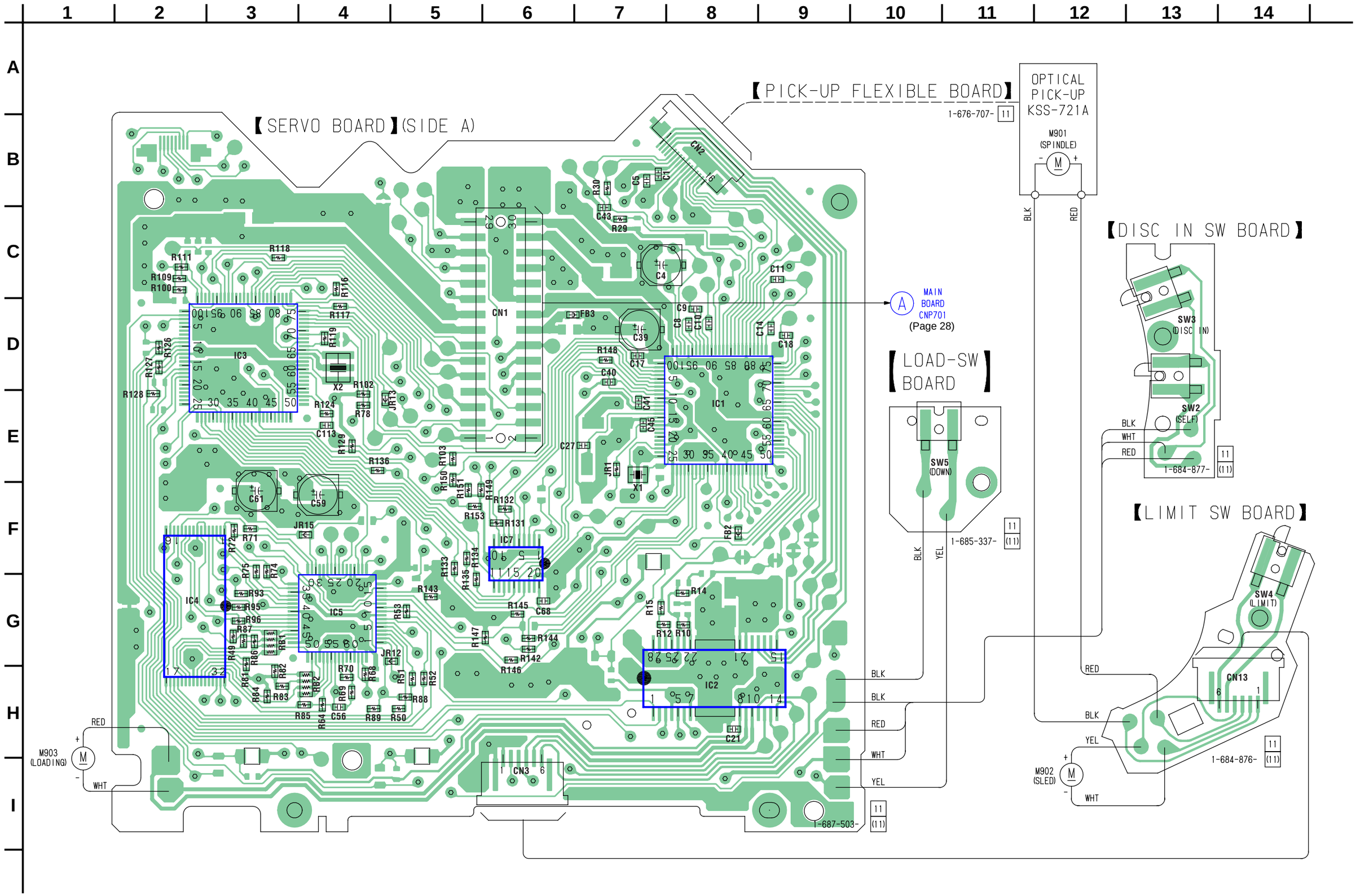
• Semiconductor Location

Ref. No.	Location
IC1	E-8
IC2	H-8
IC3	D-3
IC4	G-2
IC5	G-4
(IC6)	E-3
IC7	F-6
(IC12)	E-4
(Q1)	C-8

( ): SIDE B

【SERVO BOARD】(SIDE B)



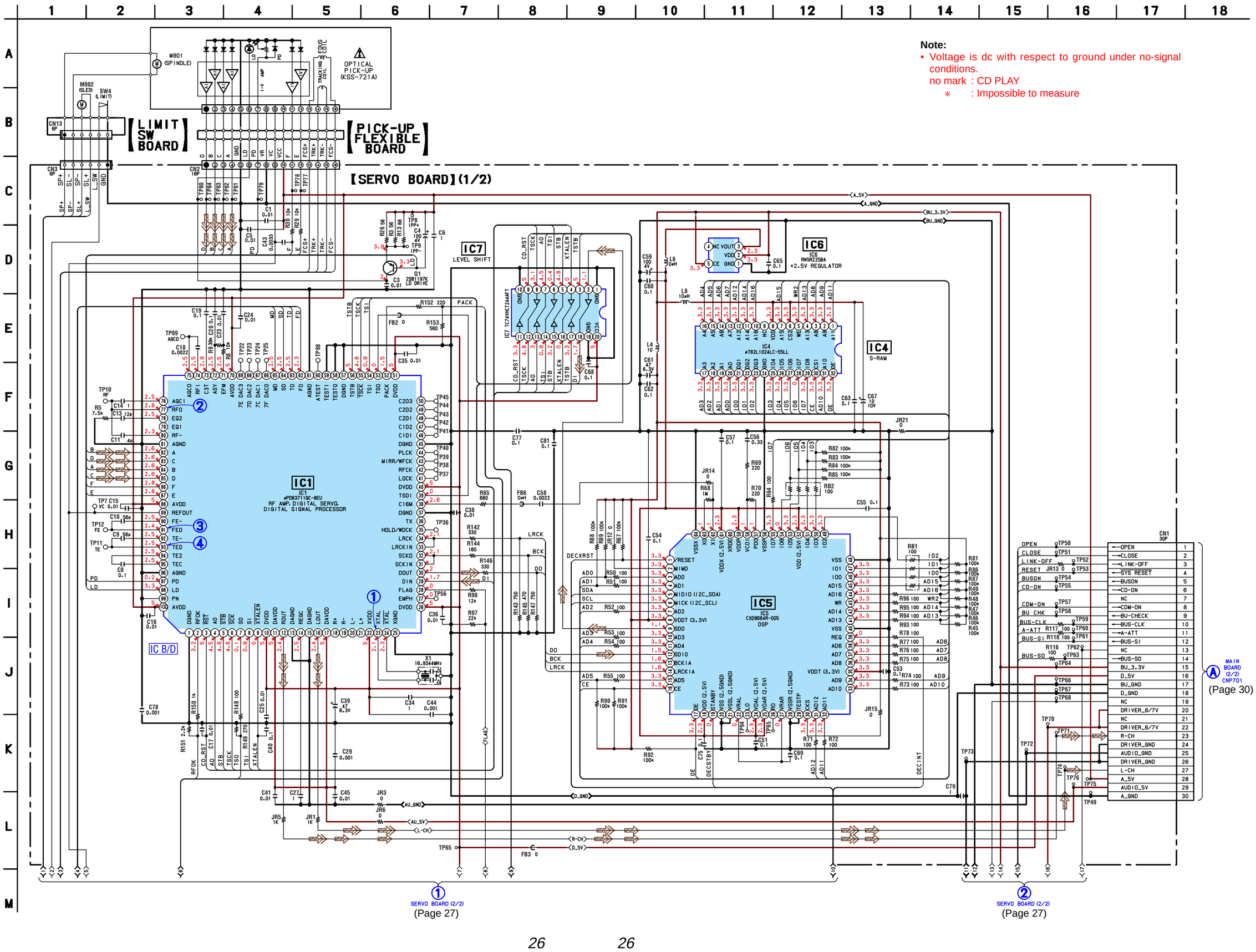

【SERVO BOARD】(SIDE A)
【PICK-UP FLEXIBLE BOARD】
1-676-707- 11
OPTICAL PICK-UP KSS-721A
M901 (SPINDLE)
BLK
RED
【DISC IN SW BOARD】
SW3 (DISC IN)
SW2 (SELF)
BLK
WHT
RED
1-684-877- 11 (11)
A MAIN BOARD CNP701 (Page 28)
【LOAD-SW BOARD】
SW5 (DOWN)
1-685-337- 11 (11)
【LIMIT SW BOARD】
SW4 (LIMIT)
CN13
1-684-876- 11 (11)
M902 (SLED)
M903 (LOADING)
CN1
CN2
CN3
IC1
IC2
IC3
IC4
IC5
IC7
X1
X2
1-687-503- 11 (11)

• Refer to page 23 for Waveforms.

3-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) —

• Refer to page 36 for IC Block Diagram.

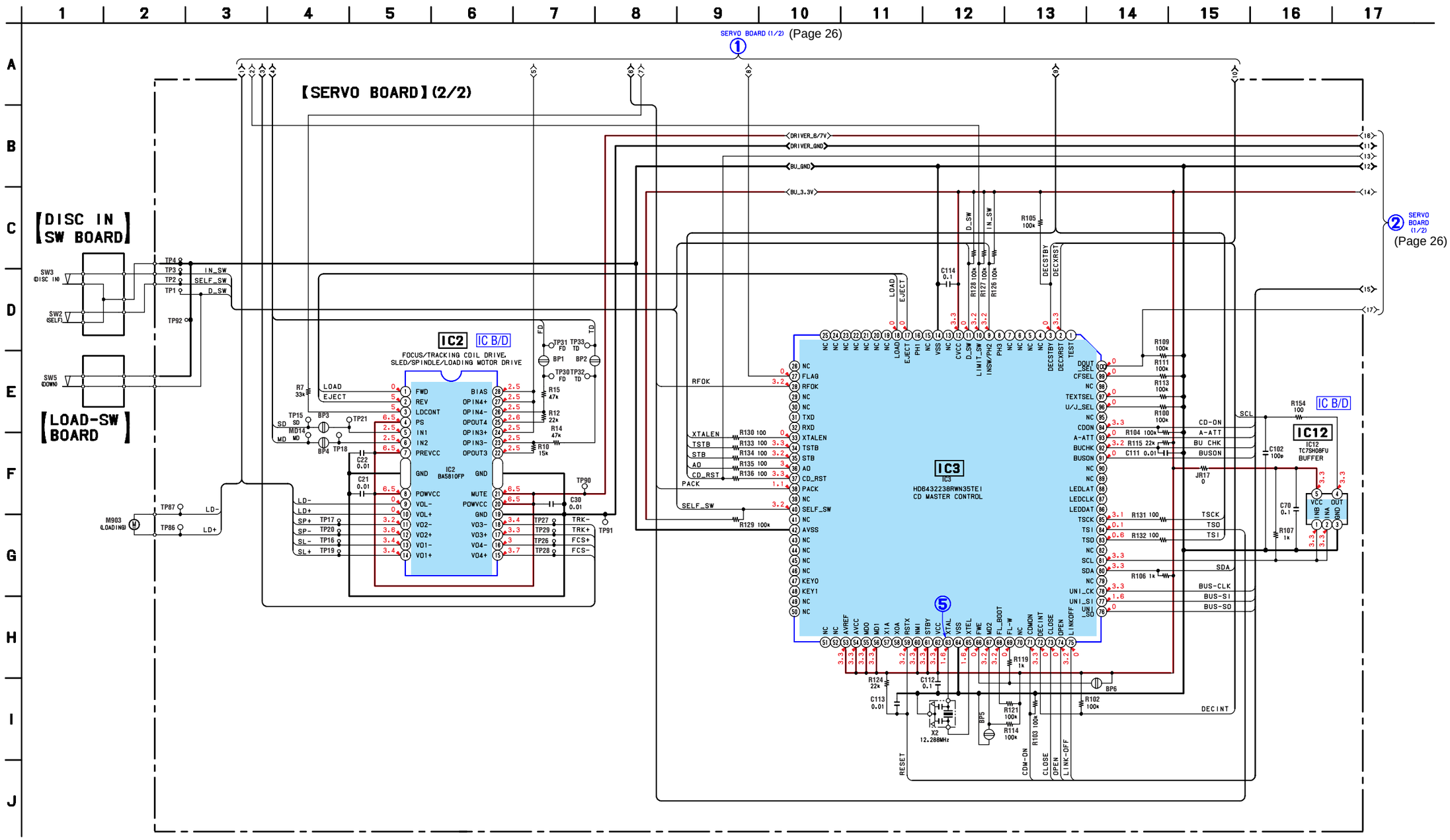
Note:
- Voltage is dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  ✻ : Impossible to measure



• Refer to page 23 for Waveform.

3-8. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) —

• Refer to page 36 for IC Block Diagrams.

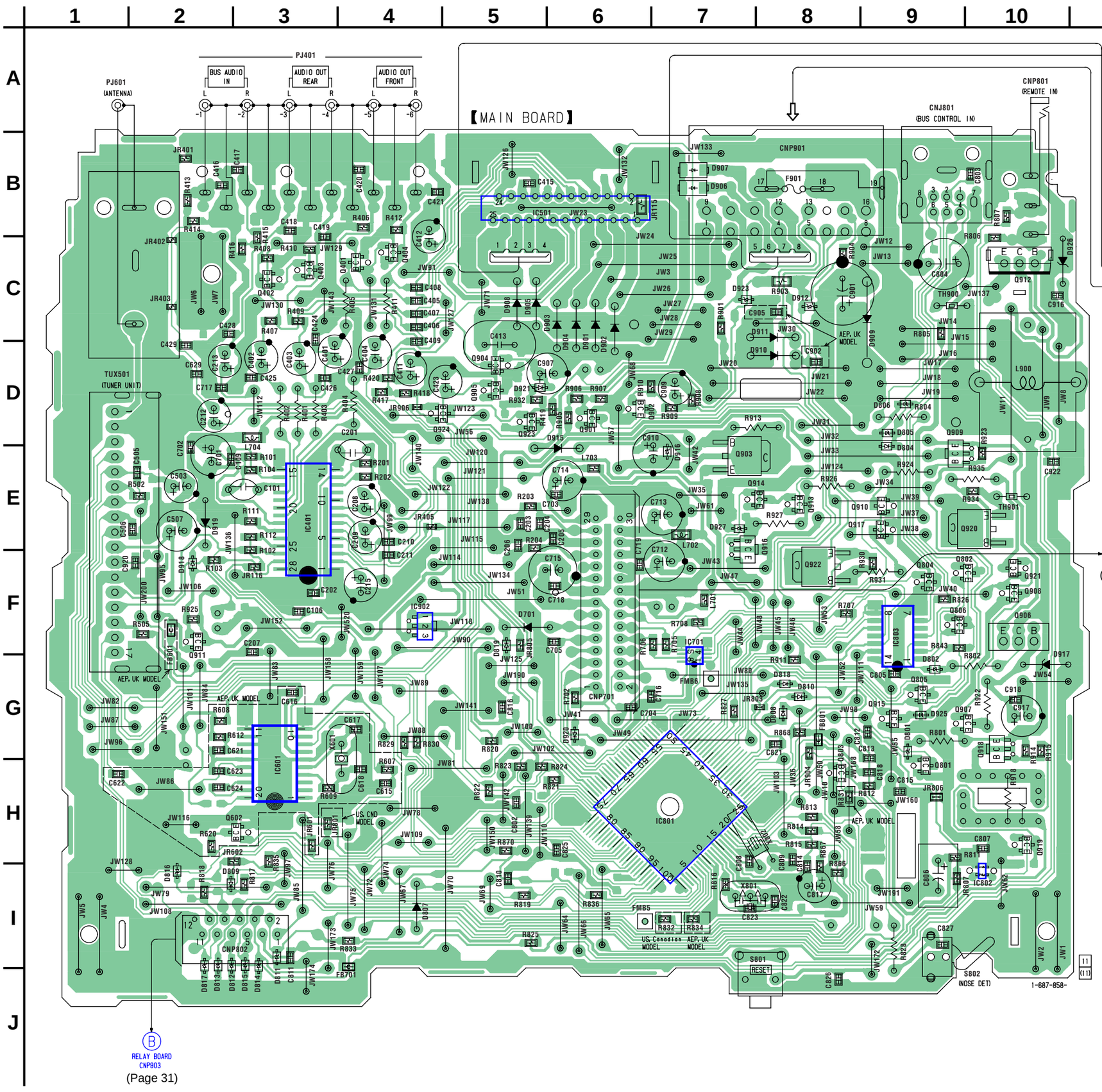


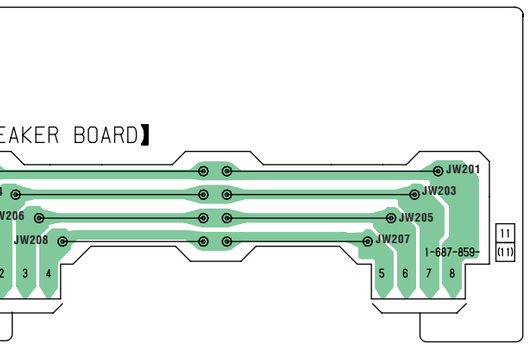
Note:

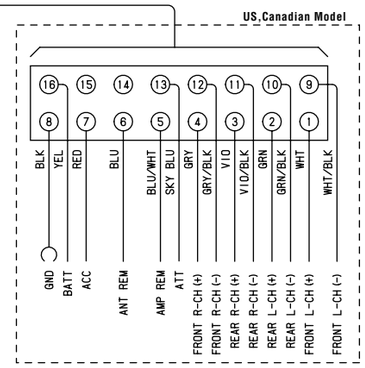
- Voltage is dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  ✻ : Impossible to measure

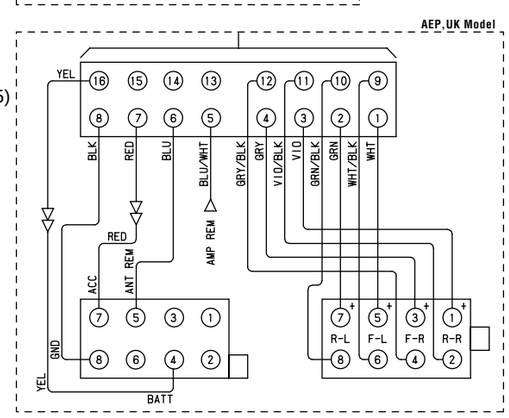
• Refer to page 20 for Circuit Boards Location.
• Refer to page 30 for Semiconductor Location.

3-9. PRINTED WIRING BOARDS — MAIN SECTION —





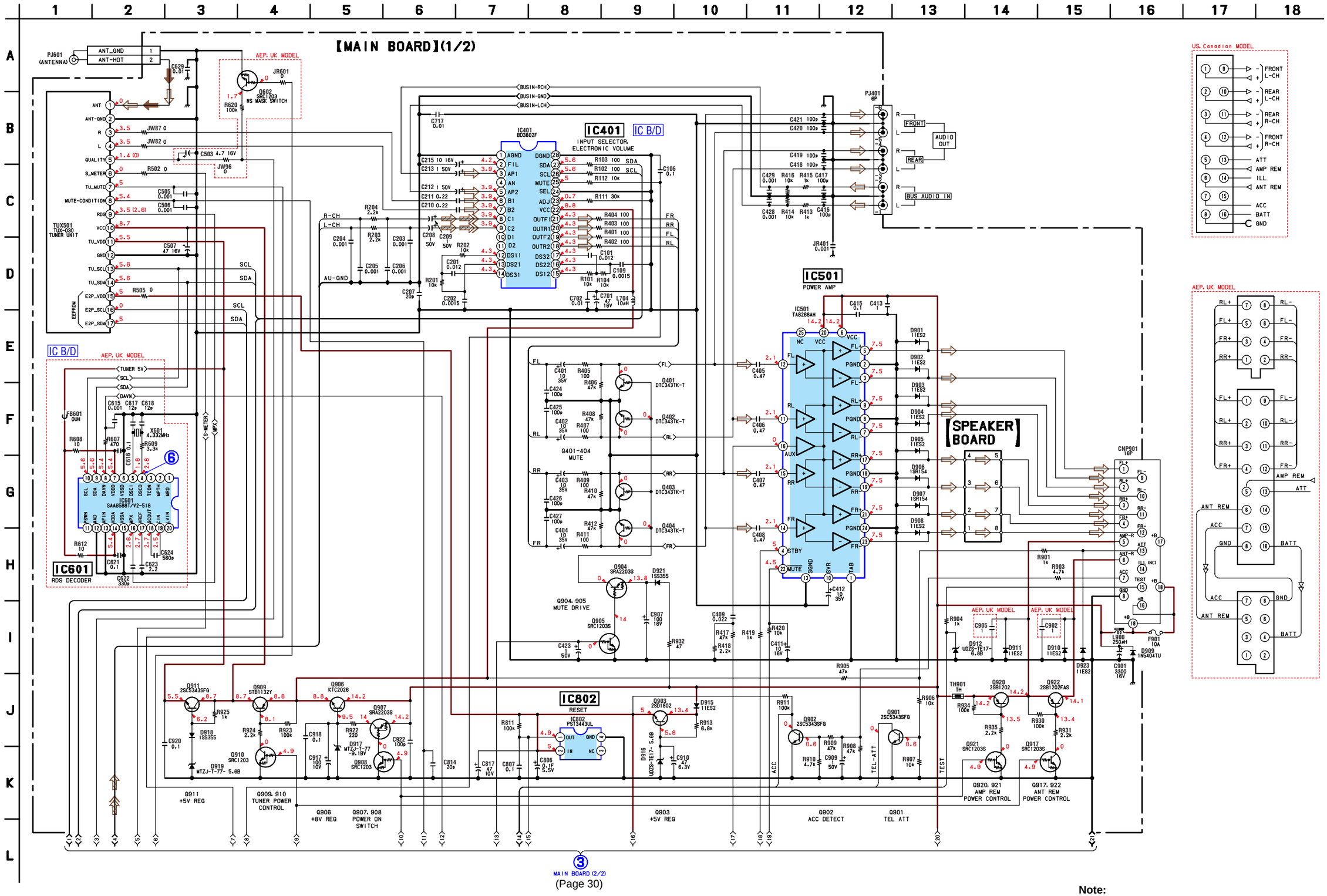




• Refer to page 23 for Waveform.

3-10. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

• Refer to page 36 for IC Block Diagrams.

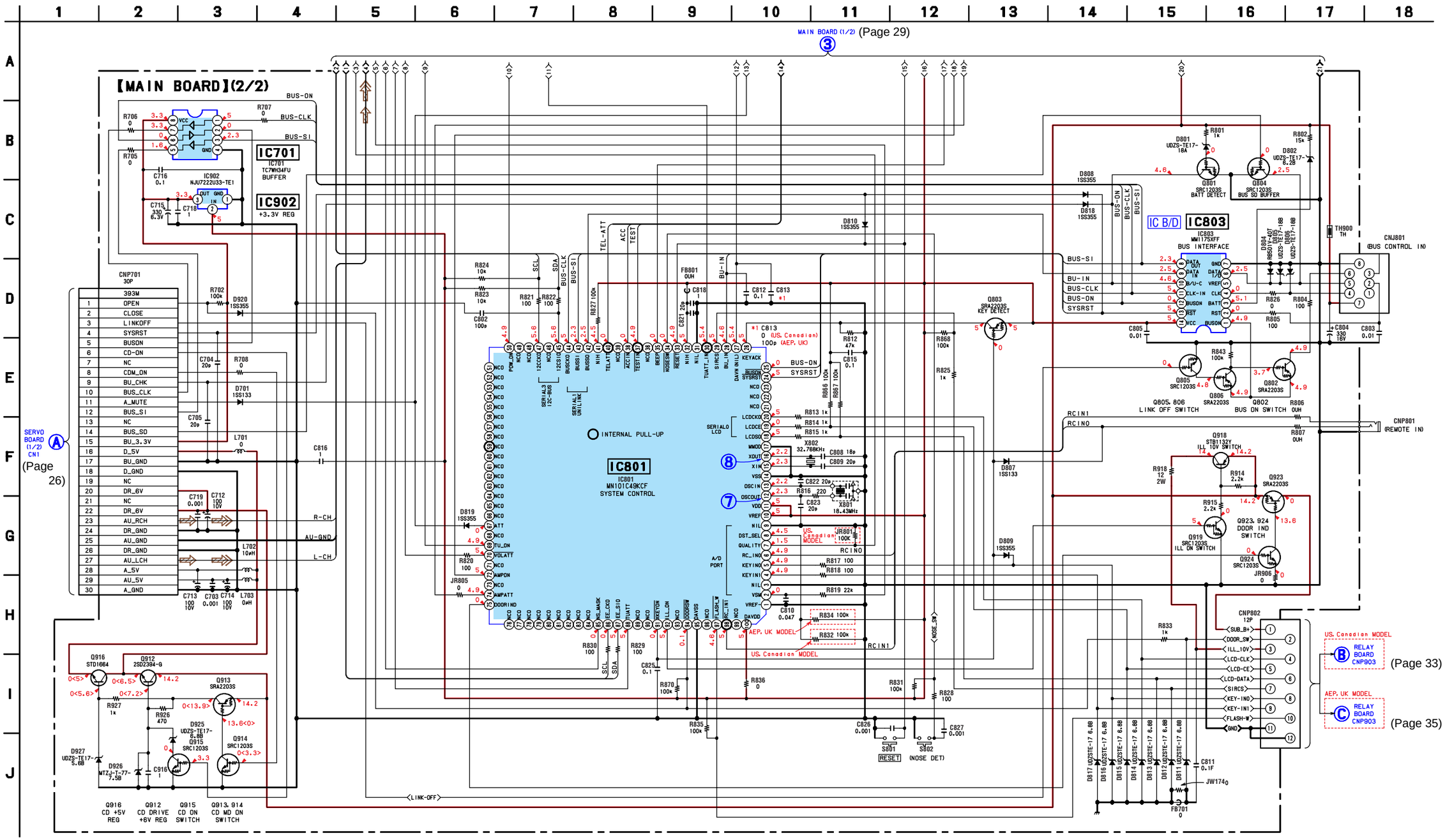


Note:

- Voltage is dc with respect to ground under no-signal conditions.
  no mark : FM
  ( ) : AM/MW/LW

• Refer to page 23 for Waveforms.

3-11. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 36 for IC Block Diagram.



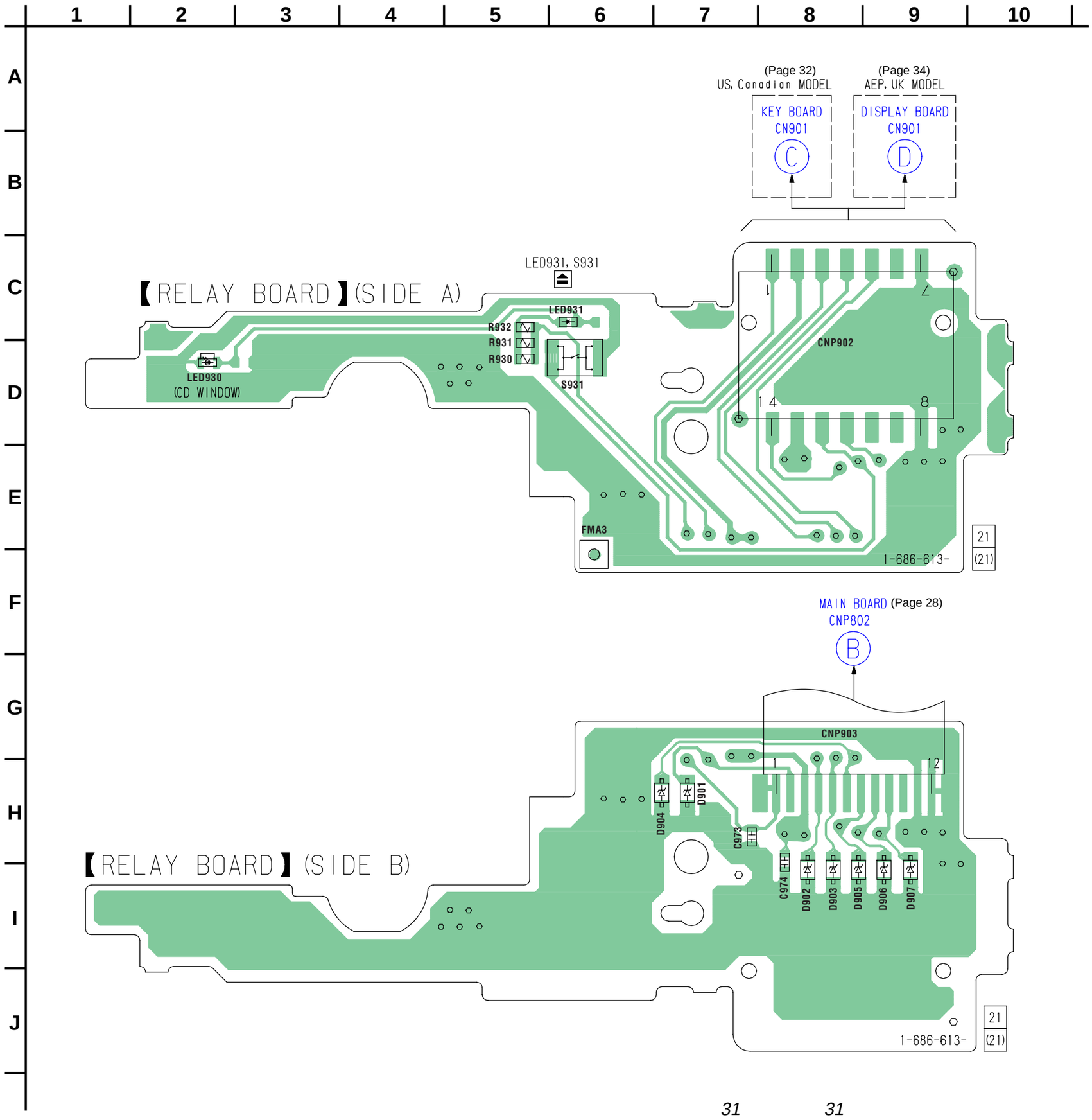
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D701	F-5	D814	J-3	D908	C-5	D925	G-9	Q401	C-4	Q902	D-6	Q914	E-7
D801	G-9	D815	J-3	D909	C-9	D926	C-10	Q402	C-3	Q903	E-7	Q915	G-9
D802	G-9	D816	I-2	D910	D-8	D927	E-7	Q403	C-3	Q904	D-5	Q916	E-7
D804	D-9	D817	J-2	D911	C-8			Q404	C-4	Q905	D-5	Q917	E-9
D805	D-9	D818	G-8	D912	C-8	IC401	E-3	Q602	H-3	Q906	F-10	Q918	G-10
D806	D-9	D819	F-5	D915	D-6	IC501	B-5	Q801	H-9	Q907	G-9	Q919	H-10
D807	I-4	D901	C-6	D916	E-7	IC601	H-3	Q802	F-9	Q908	F-10	Q920	E-10
D808	G-8	D902	C-6	D917	G-10	IC701	F-7	Q803	H-8	Q909	D-9	Q921	F-10
D809	I-2	D903	C-6	D918	F-2	IC801	H-7	Q804	F-9	Q910	E-9	Q922	F-8
D810	G-8	D904	C-6	D919	E-2	IC802	I-10	Q805	G-9	Q911	F-2	Q923	D-5
D811	J-3	D905	C-5	D920	G-6	IC803	F-9	Q806	F-9	Q912	C-10	Q924	D-4
D812	J-2	D906	B-7	D921	D-5	IC902	F-4	Q901	D-6	Q913	E-8		
D813	J-2	D907	B-7	D923	C-7								

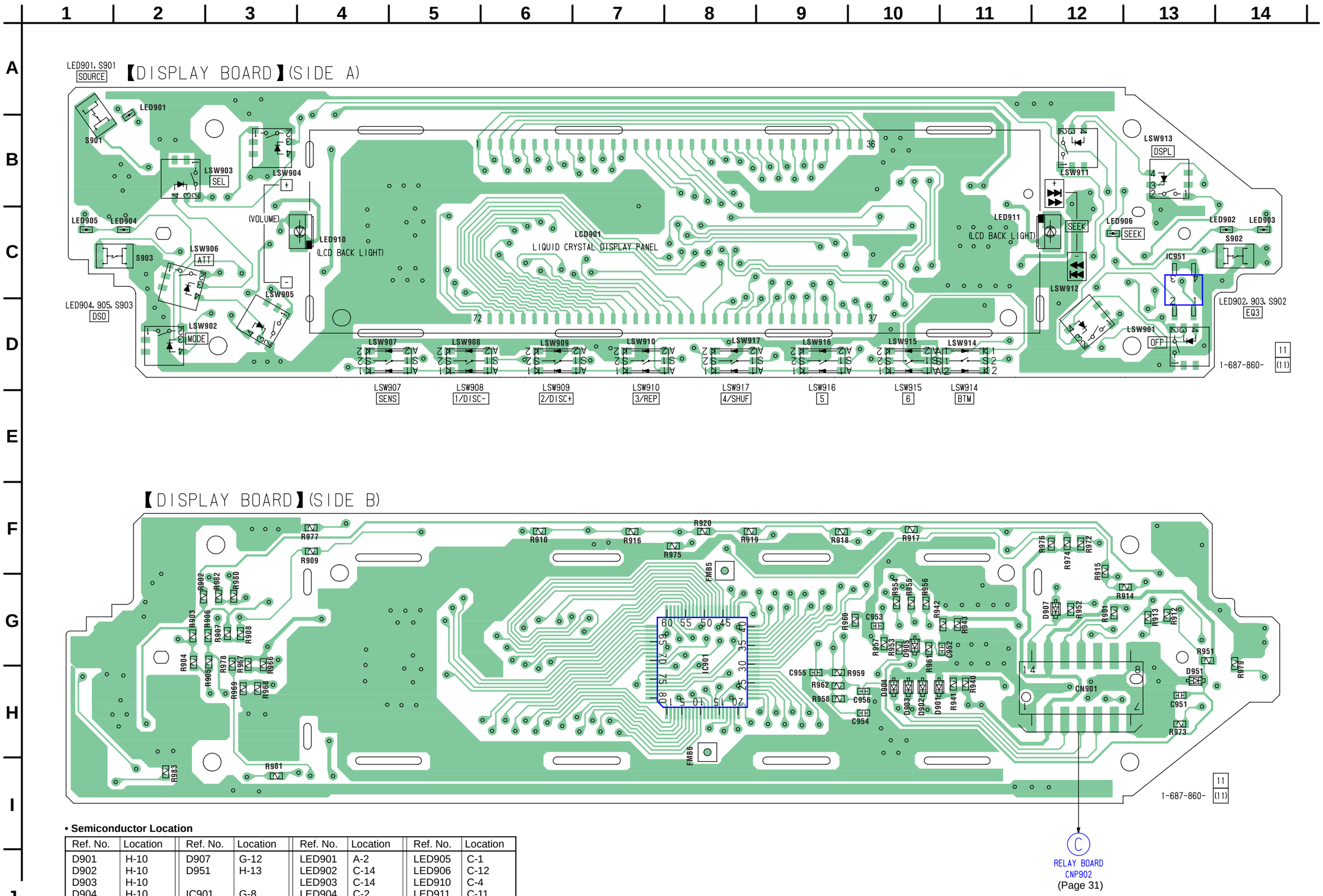
Note:

• Voltage is dc with respect to ground under no-signal conditions.
no mark : FM
( ) : AM/MW/LW
< > : CD PLAY

3-12. PRINTED WIRING BOARD — RELAY SECTION — • Refer to page 20 for Circuit Boards Location.



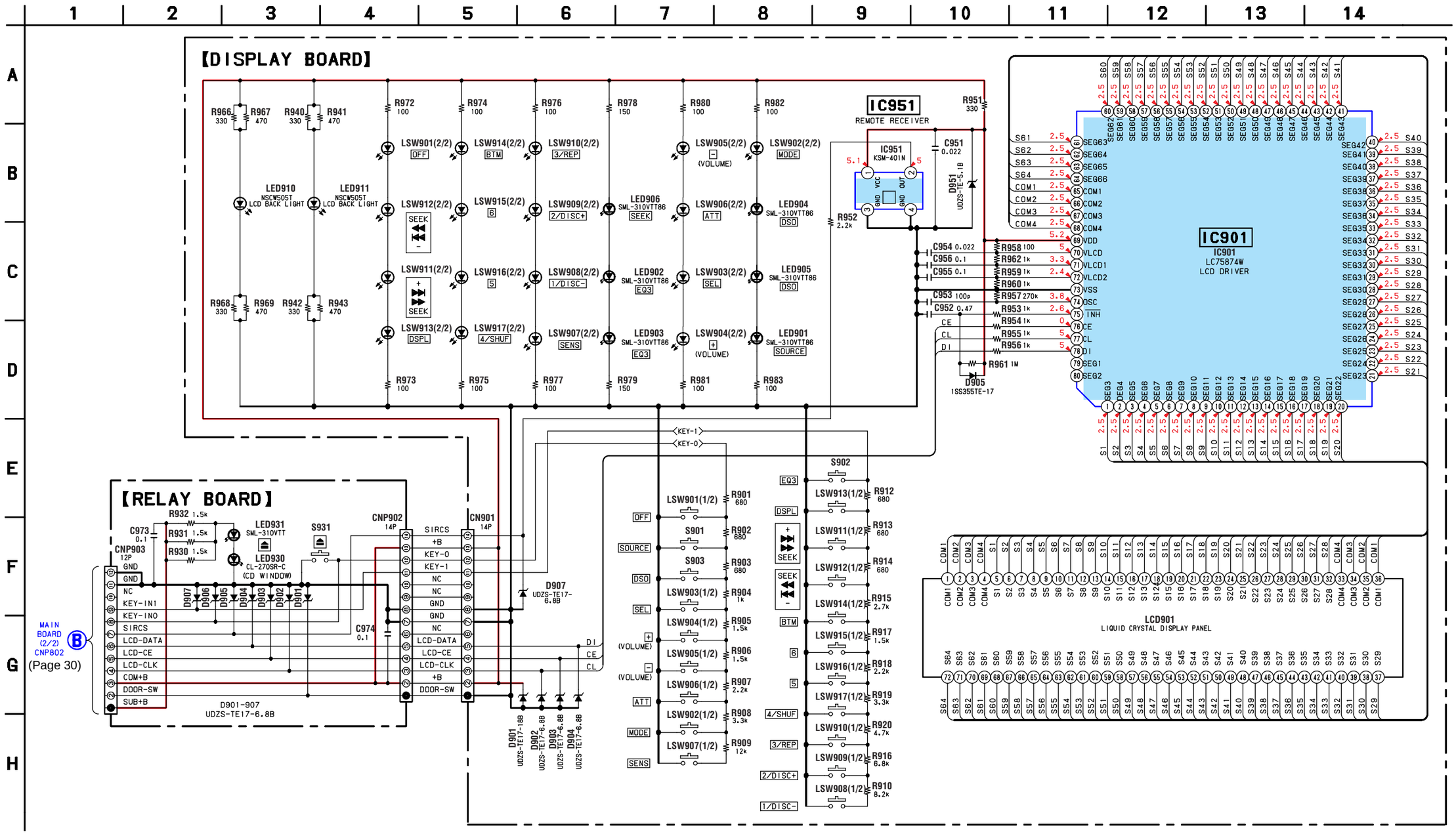
3-13. PRINTED WIRING BOARD — KEY SECTION (US, Canadian MODEL) — • Refer to page 20 for Circuit Boards Location.



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D901	H-10	D907	G-12	LED901	A-2	LED905	C-1
D902	H-10	D951	H-13	LED902	C-14	LED906	C-12
D903	H-10			LED903	C-14	LED910	C-4
D904	H-10	IC901	G-8	LED904	C-2	LED911	C-11
D905	G-10	IC951	C-13				

3-14. SCHEMATIC DIAGRAM — RELAY, KEY SECTION (US, Canadian MODEL) —

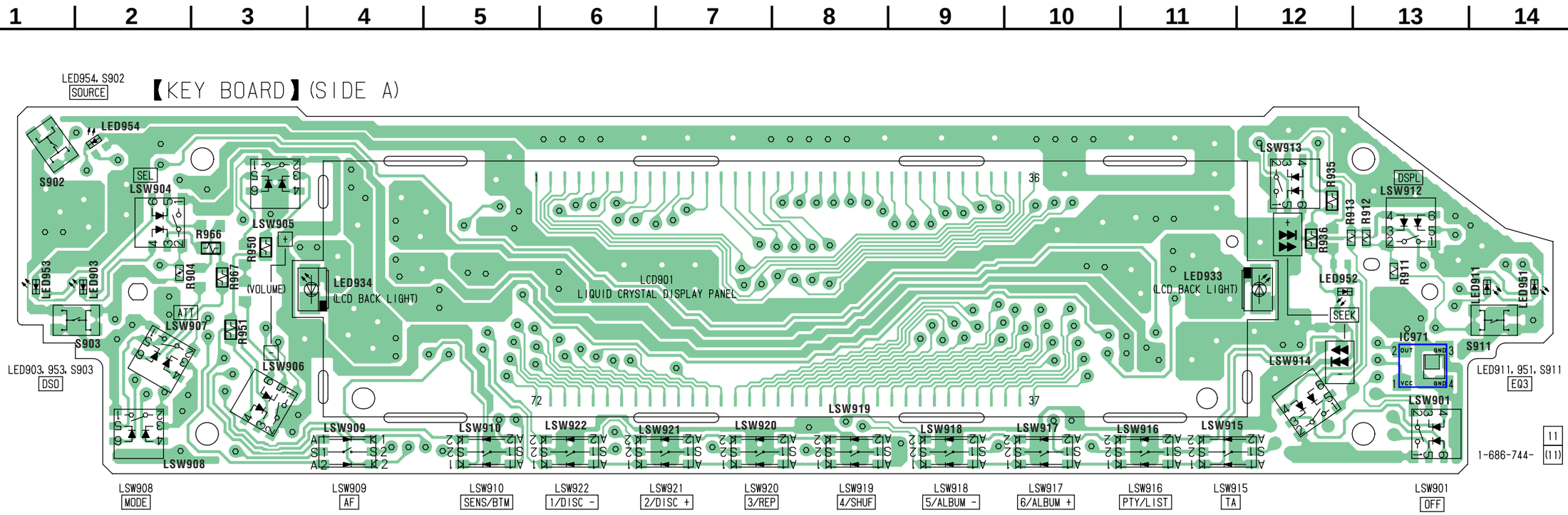


Note:

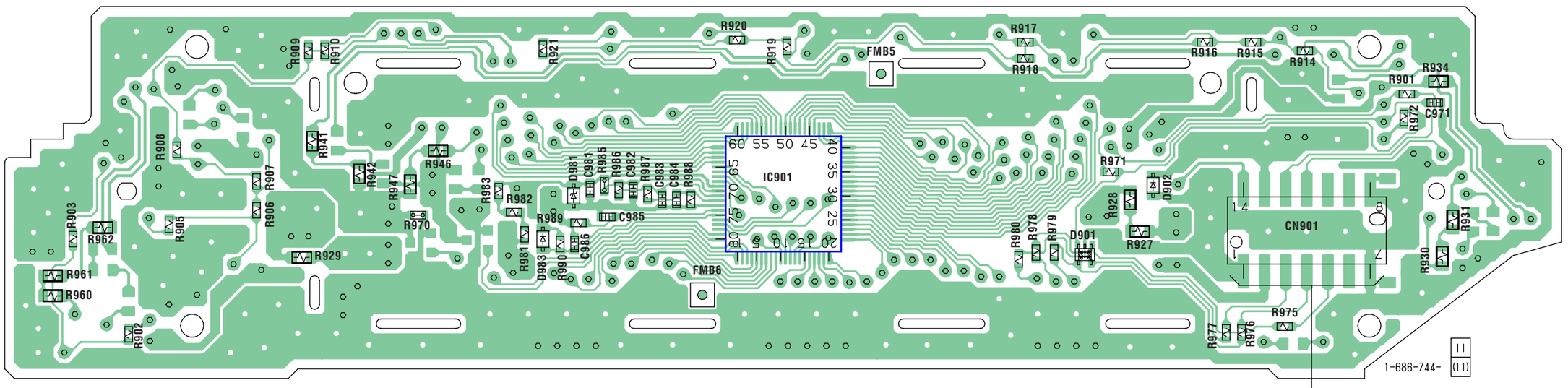
- Voltage is dc with respect to ground under no-signal conditions.
  no mark : FM

3-15. PRINTED WIRING BOARD — KEY SECTION (AEP, UK MODEL) — • Refer to page 20 for Circuit Boards Location.

【KEY BOARD】(SIDE A)



【KEY BOARD】(SIDE B)

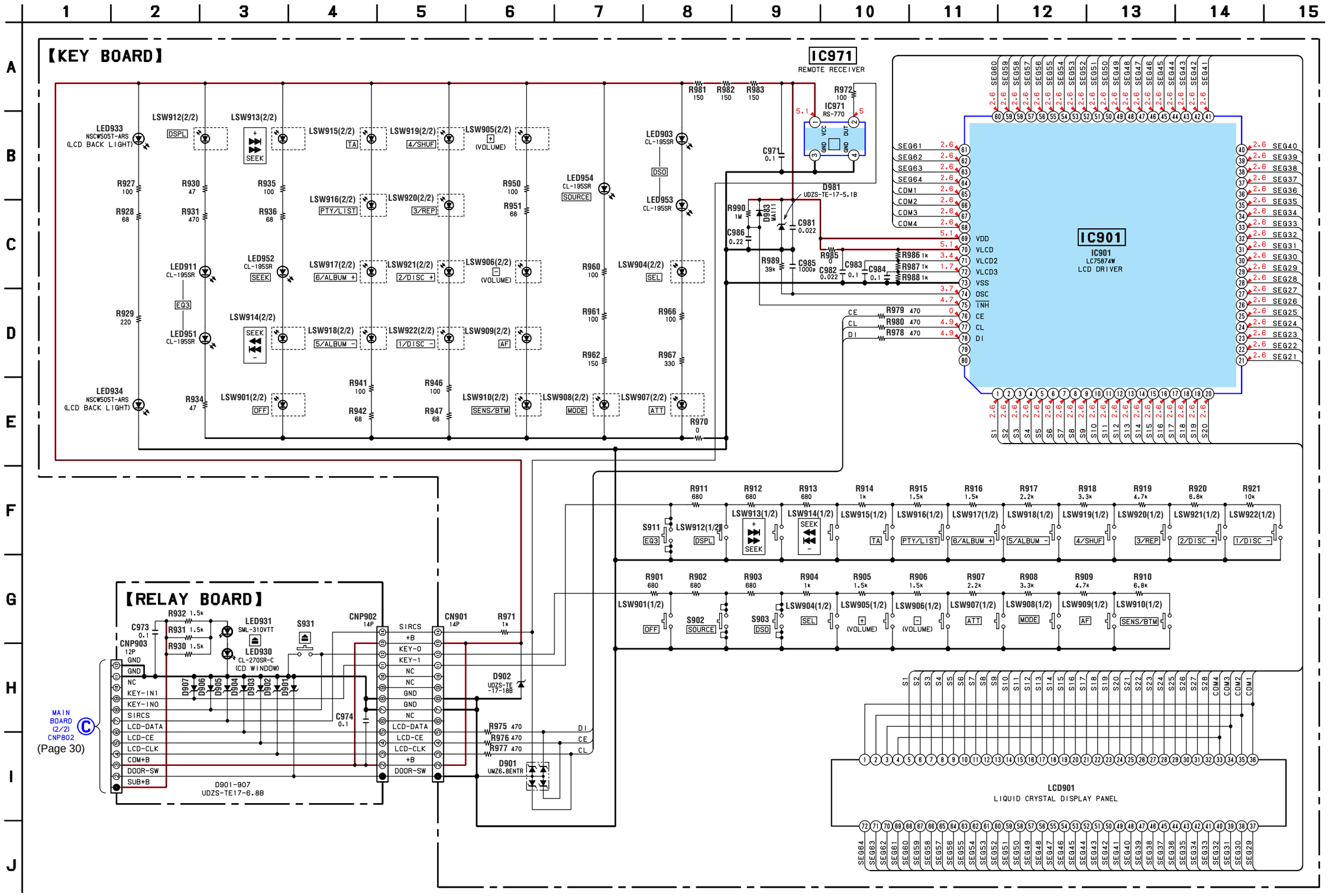


RELAY BOARD
CNP902
(Page 31)

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D901	H-10	IC971	C-13	LED934	C-4
D902	H-11			LED951	C-14
D981	G-6	LED903	C-2	LED952	C-12
D983	H-6	LED911	C-14	LED953	C-1
		LED933	C-11	LED954	A-2
IC901	G-8				

3-16. SCHEMATIC DIAGRAM — RELAY, KEY SECTION (AEP, UK MODEL) —

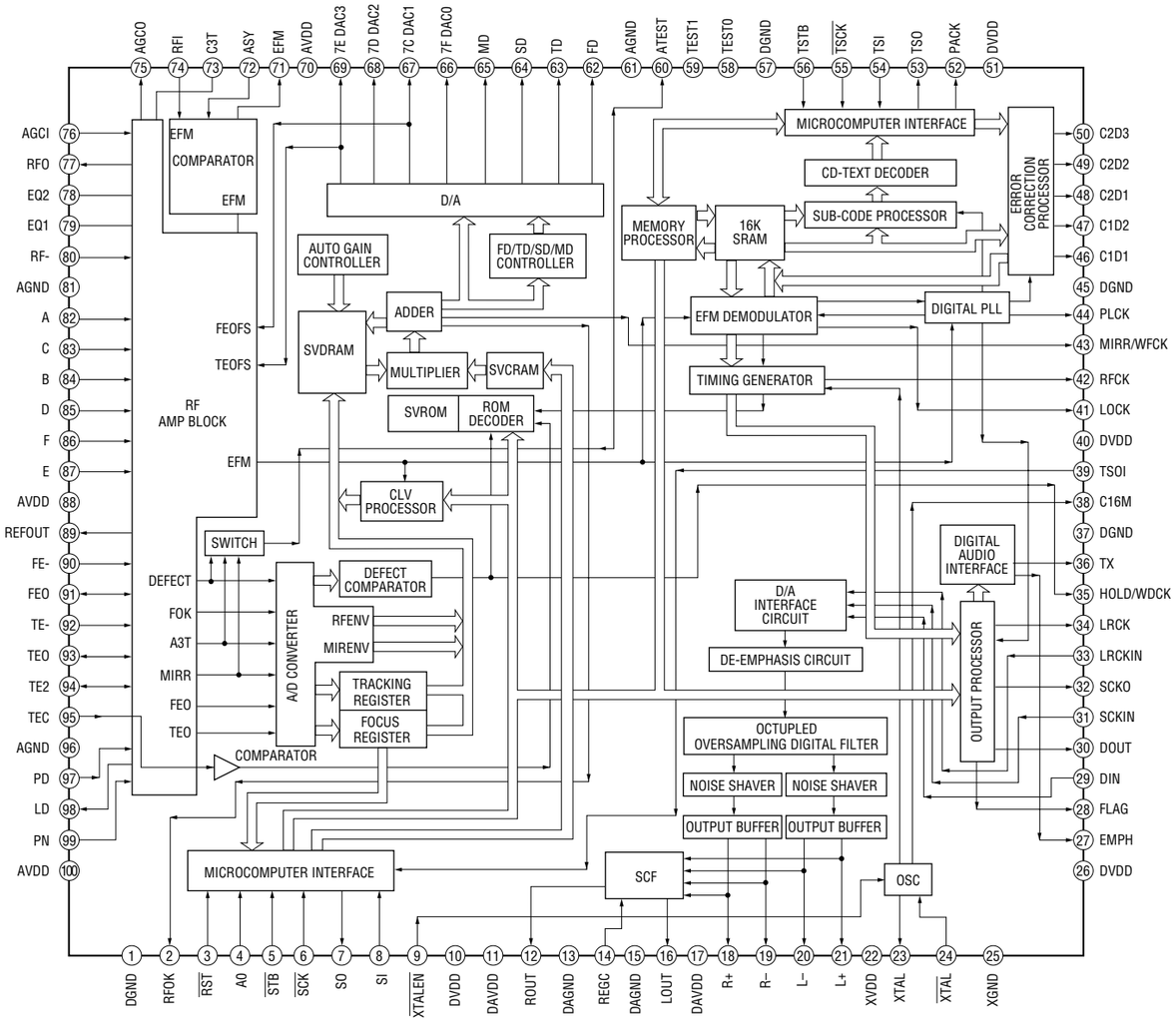


Note:

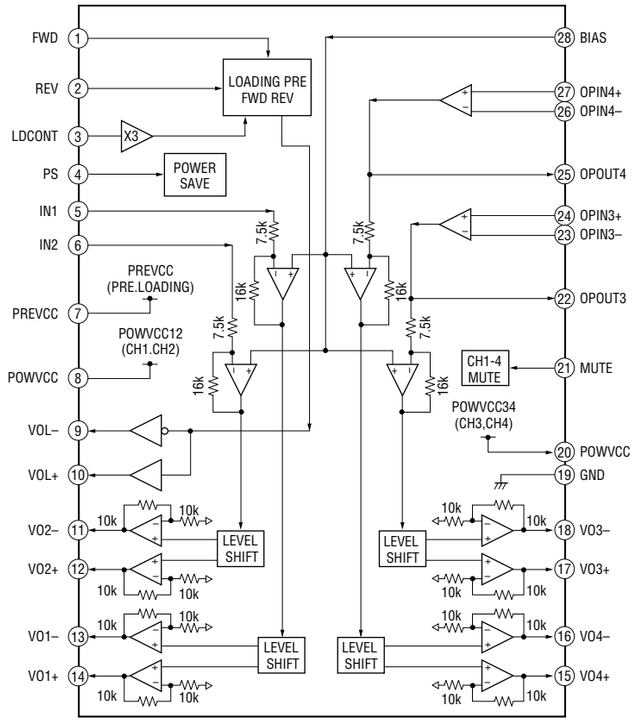
- Voltage is dc with respect to ground under no-signal conditions.
  no mark : FM

3-17. IC BLOCK DIAGRAMS

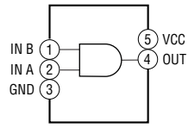
IC1 µPD63711GC-8EU



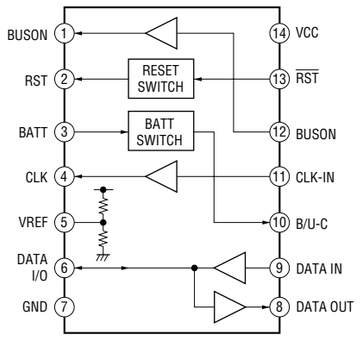
IC2 BA5810FP-E2



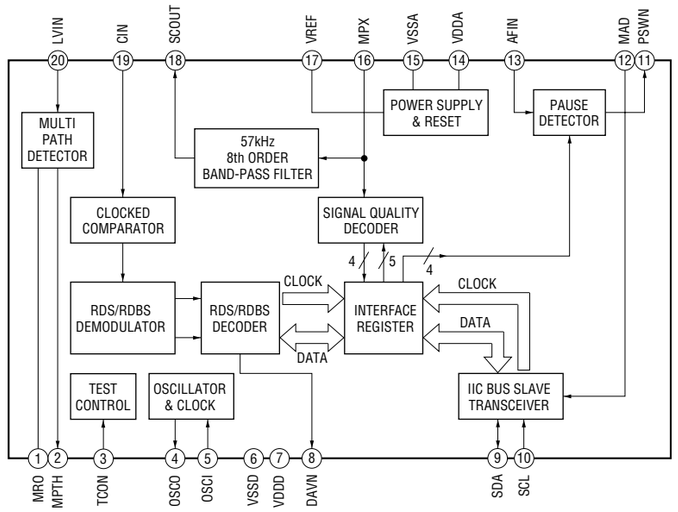
IC12 TC7SH08FU-TE85R



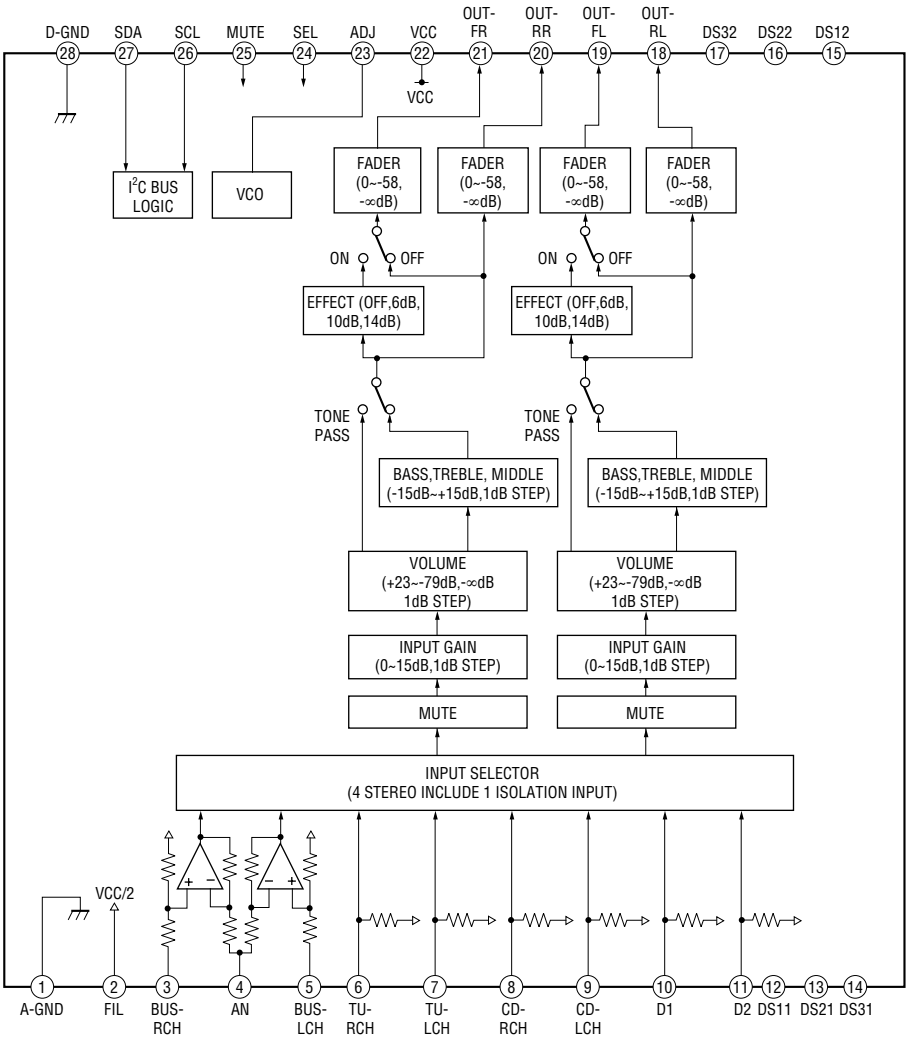
IC803 MM1175XFF



IC601 SAA6588T/V2-518



IC401 BD3802F (MAIN Board)



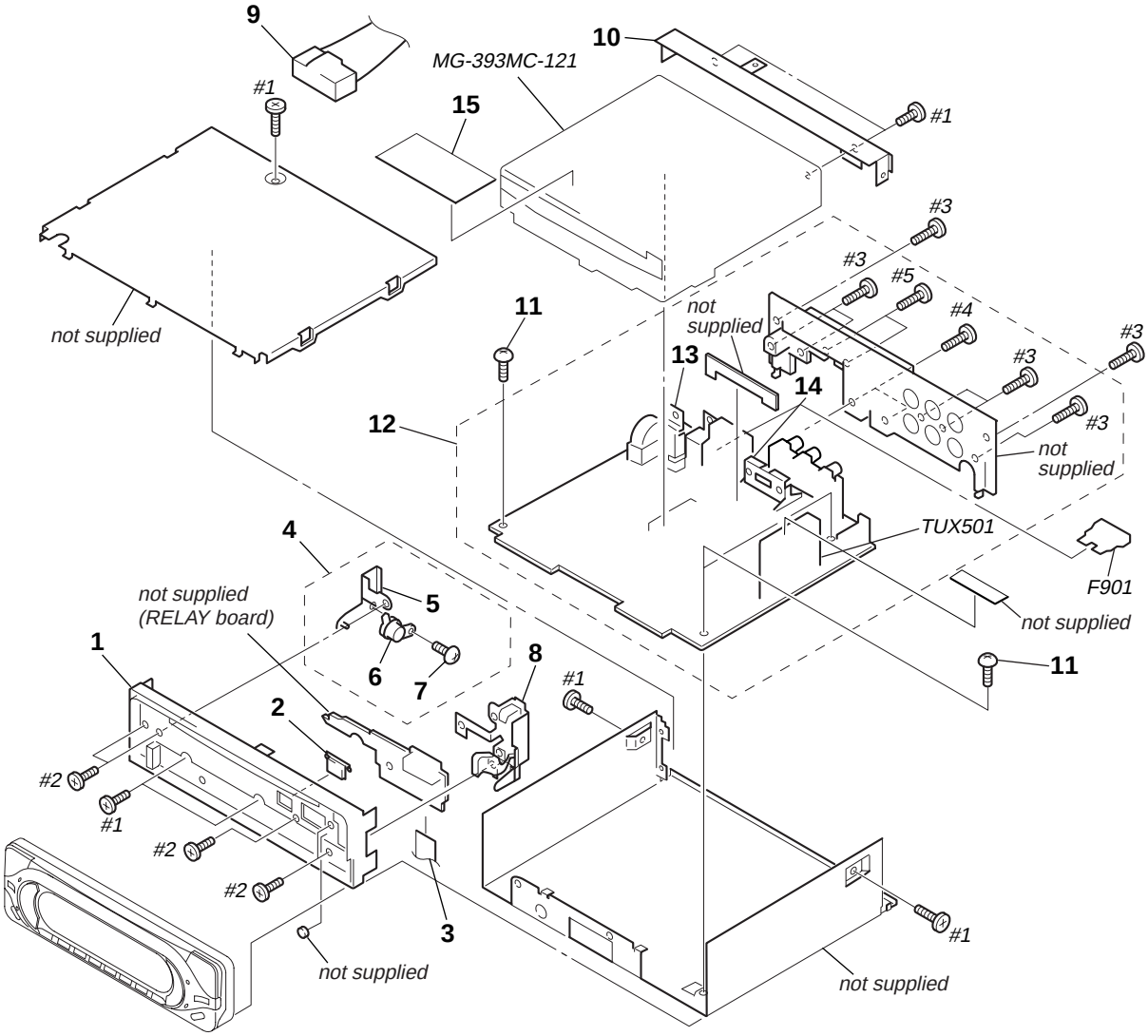
SECTION 4
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  Parts Color Cabinet's Color
- Accessories are given in the last of this parts list.
- Abbreviation
  CND: Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

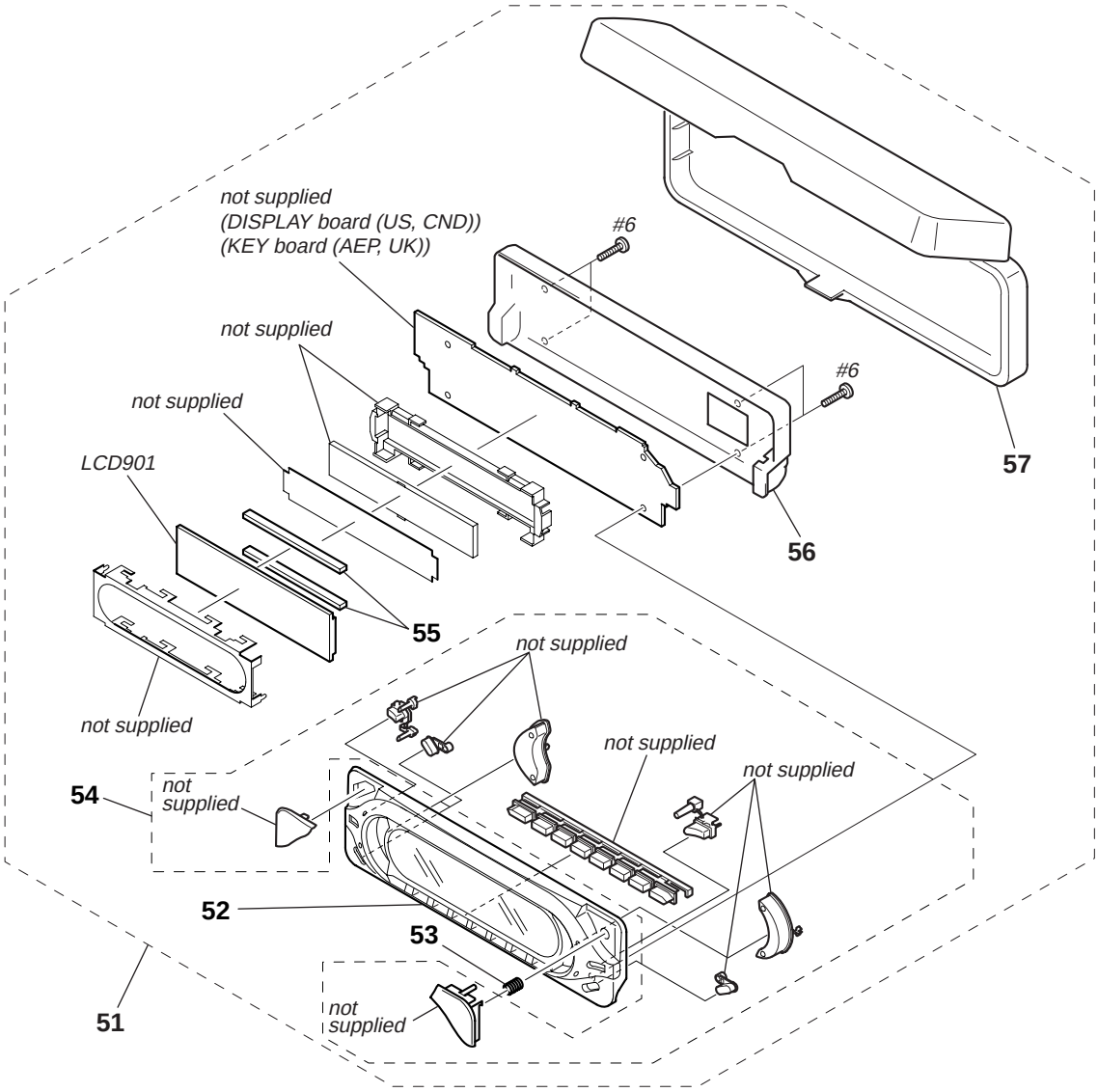
4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	X-3382-626-1	PANEL ASSY (CD), SUB	
2	3-246-030-01	BUTTON (EJECT)	
3	1-792-173-11	CABLE, FLAT (FFC) 12P	
4	X-3376-686-4	GEAR ASSY	
* 5	X-3376-689-2	BRACKET (GEAR) ASSY	
6	3-030-909-03	DAMPER, OIL	
7	3-713-786-51	SCREW +P 2X3	
8	X-3376-687-2	LOCK ASSY	
9	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (US,CND)	
9	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)	
10	3-246-007-01	BRACKET (CD)	
11	3-922-535-11	SCREW (+BTT)	

Ref. No.	Part No.	Description	Remark
12	A-3274-739-A	MAIN BOARD, COMPLETE (US,CND)	
12	A-3274-742-A	MAIN BOARD, COMPLETE (AEP,UK)	
13	3-041-261-11	BRACKET (TR)	
* 14	3-019-565-01	BRACKET (IC)	
15	3-223-913-11	LABEL (OP CAUTION) (AEP,UK)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TUX501	A-3220-887-A	TUNER UNIT (TUX-030)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-621-772-20	SCREW +B 2X5	
#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#4	7-685-795-09	SCREW +PTT 2.6X12 (S)	
#5	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

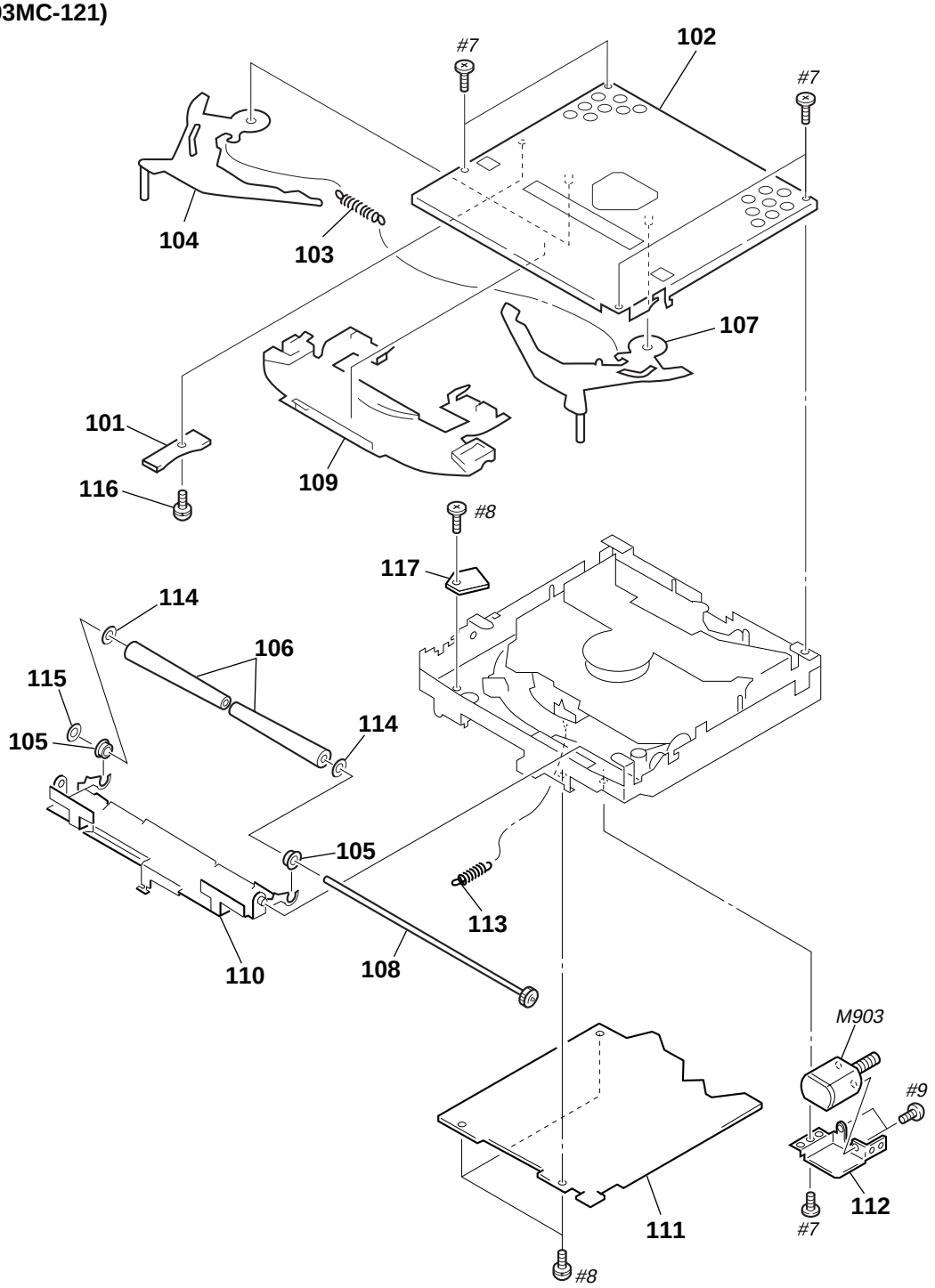
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-3337-163-A	OVERALL ASSY, FRONT PANEL (AEP,UK)	
51	A-3337-442-A	PANEL COMPLETE ASSY, FRONT (US,CND)	
52	X-3382-827-1	PANEL (S) ASSY, FRONT (AEP,UK)	
52	X-3383-151-1	PANEL (S) ASSY, FRONT (US,CND)	
53	3-246-534-01	SPRING (RELEASE) (US,CND)	
53	3-246-778-01	SPRING (OPEN) (AEP,UK)	
54	X-3383-105-1	BUTTON ASSY (S) (AEP,UK)	
54	X-3383-169-1	BUTTON ASSY (S) (US,CND)	
55	1-694-976-11	CONDUCTIVE BOARD, CONNECTION (AEP,UK)	
55	1-694-989-11	CONDUCTIVE BOARD, CONNECTION (US,CND)	

Ref. No.	Part No.	Description	Remark
56	X-3382-625-1	PANEL ASSY, FRONT BACK (US,CND)	
56	X-3382-702-1	PANEL ASSY, FRONT BACK (AEP,UK)	
57	X-3378-390-3	CASE ASSY (for FRONT PANEL) (US,CND)	
57	X-3378-490-2	CASE (PANEL) ASSY (for FRONT PANEL)	(AEP,UK)
LCD901	1-805-084-11	DISPLAY PANEL, LIQUID CRYSTAL	
#6	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

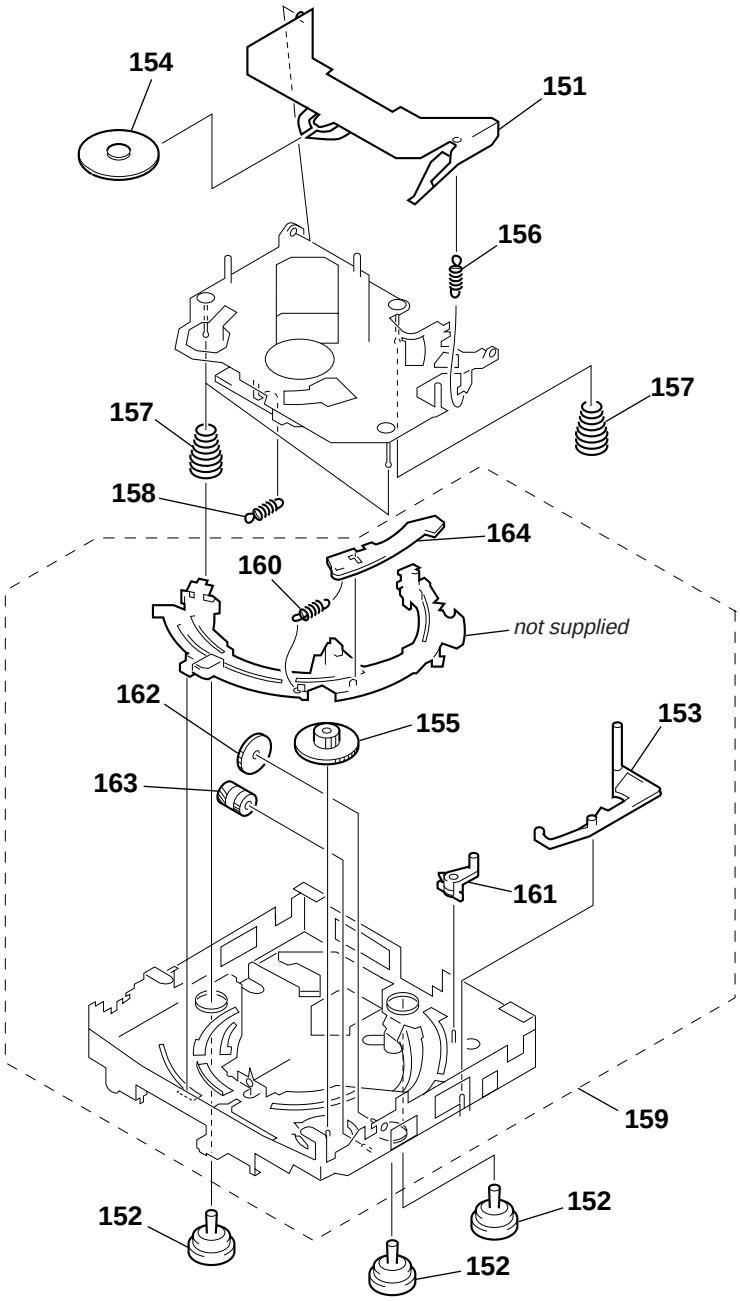
4-3. CD MECHANISM SECTION (1)
(MG-393MC-121)



Ref. No.	Part No.	Description	Remark
101	A-3274-253-A	DISC IN SW BOARD, COMPLETE	
102	3-040-039-03	CHASSIS (T)	
103	3-040-038-01	SPRING (LR), TENSION	
104	3-040-050-01	LEVER (L)	
105	3-040-022-01	RETAINER (ROLLER), SHAFT	
106	3-040-044-01	ROLLER (S)	
107	3-040-067-01	LEVER (R)	
108	A-3301-980-A	SHAFT ROLLER ASSY	
109	3-040-037-01	GUIDE (DISC)	
110	3-040-040-03	ARM (ROLLER)	
111	A-3274-698-A	SERVO BOARD, COMPLETE	

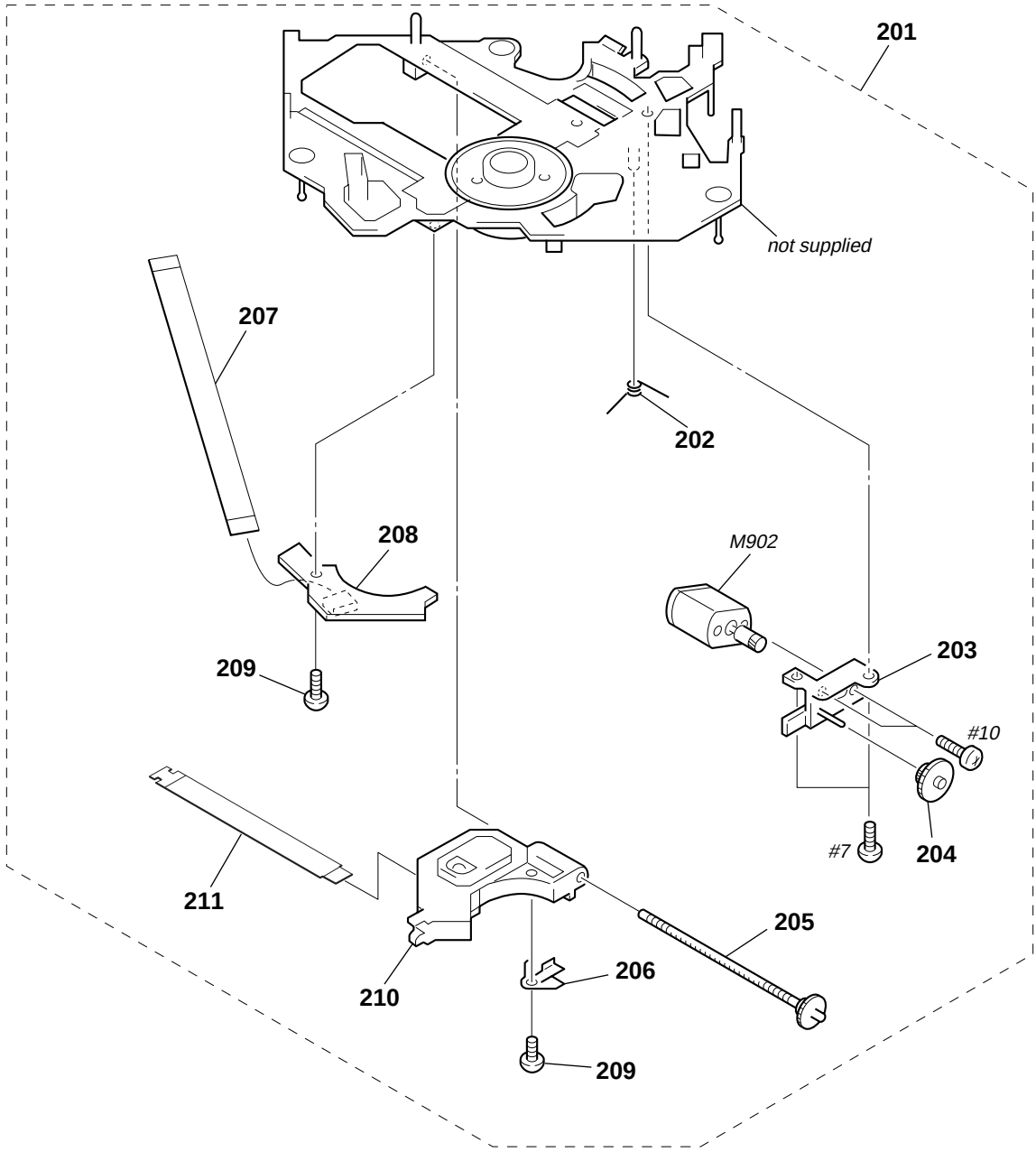
Ref. No.	Part No.	Description	Remark
112	3-221-779-02	BRACKET (MOTOR)	
113	3-040-034-01	SPRING (RA), TENSION	
114	3-040-042-01	WASHER	
115	3-043-880-01	RING (RA), RETAINING	
116	3-044-206-11	SCREW, SPECIAL	
117	1-685-337-11	LOAD SW BOARD	
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)	
#7	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE 3	
#8	7-628-253-00	SCREW, SPECIAL	
#9	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE 3	

4-4. CD MECHANISM SECTION (2)
(MG-393MC-121)



Ref. No.	Part No.	Description	Remark
151	3-040-025-02	ARM, CHUCKING	
152	3-040-031-01	DAMPER (T)	
153	3-040-056-01	LEVER (D)	
154	3-040-024-01	RETAINER (DISC)	
155	3-040-054-01	WHEEL (LW), WORM	
156	3-040-026-01	SPRING (CH), TENSION	
157	3-040-032-01	SPRING (FL), COMPRESSION	
158	3-040-033-01	SPRING (KF1), TENSION	
159	A-3307-422-A	CHASSIS (M) COMPLETE ASSY	
160	3-040-059-01	SPRING (TR), TENSION	
161	3-040-057-01	LEVER (LOCK)	
162	3-040-058-01	GEAR (MDL)	
163	3-040-052-01	WHEEL (U), WORM	
164	3-040-051-02	LEVER (TR)	

4-5. CD MECHANISM SECTION (3)
(MG-393MC-121)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
201	A-3337-193-A	FLOATING BLOCK ASSY	
202	3-040-029-01	SPRING (SL), TORSION	
203	3-040-045-01	BASE (DRIVING)	
204	3-040-194-01	GEAR (MIDWAY)	
205	A-3301-983-A	SHAFT (FEED) ASSY	
206	3-040-030-01	SPRING (FEED), PLATE	
207	1-823-951-11	CABLE, FLEXIBLE FLAT (16 CORE)	
208	A-3274-254-A	LIMIT SW BOARD, COMPLETE	
209	3-909-607-01	SCREW	
⚠210	8-820-165-06	OPTICAL PICK-UP KSS-721A/C-RP	
211	1-676-707-11	PICK-UP FLEXIBLE BOARD	
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)	
#7	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE 3	
#10	7-627-850-28	SCREW, PRECISION +P 1.4X3	

SECTION 5
ELECTRICAL PARTS LIST

DISC IN SW | DISPLAY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Abbreviation
  CND: Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark
	A-3274-253-A	DISC IN SW BOARD, COMPLETE	
		**********	
**********			
		DISPLAY BOARD (US,CND)	
		**********	
	1-694-989-11	CONDUCTIVE BOARD, CONNECTION (US,CND)	
		< CAPACITOR >	
C951	1-164-227-11	CERAMIC CHIP 0.022uF 10% 25V	(US,CND)
C952	1-125-891-11	CERAMIC CHIP 0.47uF 10% 10V	(US,CND)
C953	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	(US,CND)
C954	1-164-227-11	CERAMIC CHIP 0.022uF 10% 25V	(US,CND)
C955	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	(US,CND)
C956	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	(US,CND)
		< CONNECTOR >	
CN901	1-817-158-11	PLUG, CONNECTOR 14P (US,CND)	
		< DIODE >	
D901	8-719-083-66	DIODE UDZS-TE-17-18B (US,CND)	
D902	8-719-978-33	DIODE DTZ-TT11-6.8B (US,CND)	
D903	8-719-978-33	DIODE DTZ-TT11-6.8B (US,CND)	
D904	8-719-978-33	DIODE DTZ-TT11-6.8B (US,CND)	
D905	8-719-988-61	DIODE 1SS355TE-17 (US,CND)	
D907	8-719-978-33	DIODE DTZ-TT11-6.8B (US,CND)	
D951	8-719-069-54	DIODE UDZS-TE-17-5.1B (US,CND)	
		< IC >	
IC901	8-759-826-21	IC LC75874W (US,CND)	
IC951	8-749-017-35	IC KSM-401N (US,CND)	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-805-084-11	DISPLAY PANEL, LIQUID CRYSTAL (US,CND)	
		< DIODE >	
LED901	8-719-053-09	LED SML-310VT-T86 (SOURCE) (US,CND)	
LED902	8-719-053-09	LED SML-310VT-T86 (EQ3) (US,CND)	
LED903	8-719-053-09	LED SML-310VT-T86 (EQ3) (US,CND)	
LED904	8-719-053-09	LED SML-310VT-T86 (DSO) (US,CND)	
LED905	8-719-053-09	LED SML-310VT-T86 (DSO) (US,CND)	
LED906	8-719-053-09	LED SML-310VT-T86 (SEEK) (US,CND)	
LED910	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)	(US,CND)
LED911	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)	(US,CND)
		< SWITCH >	
LSW901	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (OFF)	(US,CND)
LSW902	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (MODE)	(US,CND)
LSW903	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SEL)	(US,CND)
LSW904	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (VOLUME +)	(US,CND)
LSW905	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (VOLUME –)	(US,CND)
LSW906	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (ATT)	(US,CND)
LSW907	1-771-883-31	SWITCH, TACTILE (WITH LED) (SENS)	(US,CND)
LSW908	1-771-883-31	SWITCH, TACTILE (WITH LED) (1/DISC –)	(US,CND)
LSW909	1-771-883-31	SWITCH, TACTILE (WITH LED) (2/DISC +)	(US,CND)
LSW910	1-771-883-31	SWITCH, TACTILE (WITH LED) (3/REP)	(US,CND)
LSW911	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (+ ▶▶I ▶▶ SEEK)	(US,CND)
LSW912	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SEEK ◀◀ I◀◀ –)	(US,CND)
LSW913	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (DSPL)	(US,CND)
LSW914	1-771-883-31	SWITCH, TACTILE (WITH LED) (BTM)	(US,CND)
LSW915	1-771-883-31	SWITCH, TACTILE (WITH LED) (6) (US,CND)	
LSW916	1-771-883-31	SWITCH, TACTILE (WITH LED) (5) (US,CND)	
LSW917	1-771-883-31	SWITCH, TACTILE (WITH LED) (4/SHUF)	(US,CND)
		< RESISTOR >	
R901	1-216-819-11	METAL CHIP 680 5% 1/10W	(US,CND)

DISPLAY | KEY

Ref. No.	Part No.	Description			Remark
R902	1-216-819-11	METAL CHIP	680	5%	1/10W (US,CND)
R903	1-216-819-11	METAL CHIP	680	5%	1/10W (US,CND)
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R905	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (US,CND)
R906	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (US,CND)
R907	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US,CND)
R908	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (US,CND)
R909	1-216-834-11	METAL CHIP	12K	5%	1/10W (US,CND)
R910	1-216-832-11	METAL CHIP	8.2K	5%	1/10W (US,CND)
R912	1-216-819-11	METAL CHIP	680	5%	1/10W (US,CND)
R913	1-216-819-11	METAL CHIP	680	5%	1/10W (US,CND)
R914	1-216-819-11	METAL CHIP	680	5%	1/10W (US,CND)
R915	1-216-826-11	METAL CHIP	2.7K	5%	1/10W (US,CND)
R916	1-218-867-11	METAL CHIP	6.8K	5%	1/10W (US,CND)
R917	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (US,CND)
R918	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US,CND)
R919	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (US,CND)
R920	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (US,CND)
R940	1-216-815-11	METAL CHIP	330	5%	1/10W (US,CND)
R941	1-216-817-11	METAL CHIP	470	5%	1/10W (US,CND)
R942	1-216-815-11	METAL CHIP	330	5%	1/10W (US,CND)
R943	1-216-817-11	METAL CHIP	470	5%	1/10W (US,CND)
R951	1-216-815-11	METAL CHIP	330	5%	1/10W (US,CND)
R952	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US,CND)
R953	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R954	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R955	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R956	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R957	1-216-850-11	METAL CHIP	270K	5%	1/10W (US,CND)
R958	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R959	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R960	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R961	1-216-857-11	METAL CHIP	1M	5%	1/10W (US,CND)
R962	1-216-821-11	METAL CHIP	1K	5%	1/10W (US,CND)
R966	1-216-815-11	METAL CHIP	330	5%	1/10W (US,CND)
R967	1-216-817-11	METAL CHIP	470	5%	1/10W (US,CND)
R968	1-216-815-11	METAL CHIP	330	5%	1/10W (US,CND)
R969	1-216-817-11	METAL CHIP	470	5%	1/10W (US,CND)
R972	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R973	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R974	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R975	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R976	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R977	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R978	1-216-811-11	METAL CHIP	150	5%	1/10W (US,CND)
R979	1-216-811-11	METAL CHIP	150	5%	1/10W (US,CND)
R980	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R981	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R982	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
R983	1-216-809-11	METAL CHIP	100	5%	1/10W (US,CND)
		< SWITCH >			
S901	1-771-884-31	SWITCH, TACTILE (WITH LED) (SOURCE)			(US,CND)
S902	1-771-884-31	SWITCH, TACTILE (WITH LED) (EQ3)			(US,CND)
S903	1-771-884-31	SWITCH, TACTILE (WITH LED) (DSO)			(US,CND)
**********					
		KEY BOARD (AEP,UK)			
		**********			
	1-694-976-11	CONDUCTIVE BOARD, CONNECTION (AEP,UK)			
		< CAPACITOR >			
C971	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C981	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (AEP,UK)
C982	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (AEP,UK)
C983	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C984	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)

Ref. No.	Part No.	Description			Remark
C985	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C986	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V (AEP,UK)
		< CONNECTOR >			
CN901	1-817-158-21	PLUG, CONNECTOR 14P (AEP,UK)			
		< DIODE >			
D901	8-719-085-72	DIODE UMZ6.8ENTR (AEP,UK)			
D902	8-719-083-66	DIODE UDZS-TE-17-18B (AEP,UK)			
D981	8-719-069-54	DIODE UDZS-TE-17-5.1B (AEP,UK)			
D983	8-719-404-50	DIODE MA111-TX (AEP,UK)			
		< IC >			
IC901	8-759-826-21	IC LC75874W (AEP,UK)			
IC971	6-600-163-01	IC RS-770 (AEP,UK)			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-805-084-11	DISPLAY PANEL, LIQUID CRYSTAL (AEP,UK)			
		< DIODE >			
LED903	6-500-450-01	LED CL-195SR-CD-T (DSO) (AEP,UK)			
LED911	6-500-450-01	LED CL-195SR-CD-T (EQ3) (AEP,UK)			
LED933	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT) (AEP,UK)			
LED934	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT) (AEP,UK)			
LED951	6-500-450-01	LED CL-195SR-CD-T (EQ3) (AEP,UK)			
LED952	6-500-450-01	LED CL-195SR-CD-T (SEEK) (AEP,UK)			
LED953	6-500-450-01	LED CL-195SR-CD-T (DSO) (AEP,UK)			
LED954	6-500-450-01	LED CL-195SR-CD-T (SOURCE) (AEP,UK)			
		< SWITCH >			
LSW901	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (OFF) (AEP,UK)			
LSW904	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SEL) (AEP,UK)			
LSW905	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (VOLUME +) (AEP,UK)			
LSW906	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (VOLUME –) (AEP,UK)			
LSW907	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (ATT) (AEP,UK)			
LSW908	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (MODE) (AEP,UK)			
LSW909	1-771-883-31	SWITCH, TACTILE (WITH LED) (AF) (AEP,UK)			
LSW910	1-771-883-31	SWITCH, TACTILE (WITH LED) (SENS/BTM) (AEP,UK)			
LSW912	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (DSPL) (AEP,UK)			
LSW913	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (+ ▶▶I ▶▶ SEEK) (AEP,UK)			
LSW914	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SEEK ◀◀ I◀◀ –) (AEP,UK)			
LSW915	1-771-883-31	SWITCH, TACTILE (WITH LED) (TA) (AEP,UK)			
LSW916	1-771-883-31	SWITCH, TACTILE (WITH LED) (PTY/LIST) (AEP,UK)			
LSW917	1-771-883-31	SWITCH, TACTILE (WITH LED) (6/ALBUM +) (AEP,UK)			
LSW918	1-771-883-31	SWITCH, TACTILE (WITH LED) (5/ALBUM –) (AEP,UK)			
LSW919	1-771-883-31	SWITCH, TACTILE (WITH LED) (4/SHUF) (AEP,UK)			
LSW920	1-771-883-31	SWITCH, TACTILE (WITH LED) (3/REP) (AEP,UK)			
LSW921	1-771-883-31	SWITCH, TACTILE (WITH LED) (2/DISC +) (AEP,UK)			
LSW922	1-771-883-31	SWITCH, TACTILE (WITH LED) (1/DISC –) (AEP,UK)			
		< RESISTOR >			
R901	1-216-819-11	METAL CHIP	680	5%	1/10W (AEP,UK)
R902	1-216-819-11	METAL CHIP	680	5%	1/10W (AEP,UK)
R903	1-216-819-11	METAL CHIP	680	5%	1/10W (AEP,UK)
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R905	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (AEP,UK)
R906	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (AEP,UK)
R907	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (AEP,UK)
R908	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (AEP,UK)
R909	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (AEP,UK)
R910	1-218-867-11	METAL CHIP	6.8K	5%	1/10W (AEP,UK)
R911	1-216-819-11	METAL CHIP	680	5%	1/10W (AEP,UK)
R912	1-216-819-11	METAL CHIP	680	5%	1/10W (AEP,UK)
R913	1-216-819-11	METAL CHIP	680	5%	1/10W (AEP,UK)
R914	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R915	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (AEP,UK)
R916	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (AEP,UK)
R917	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (AEP,UK)
R918	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (AEP,UK)
R919	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (AEP,UK)
R920	1-218-867-11	METAL CHIP	6.8K	5%	1/10W (AEP,UK)
R921	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP,UK)
R927	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R928	1-216-021-00	METAL CHIP	68	5%	1/10W (AEP,UK)
R929	1-216-033-00	METAL CHIP	220	5%	1/10W (AEP,UK)
R930	1-216-017-11	RES-CHIP	47	5%	1/10W (AEP,UK)

KEY **LIMIT SW** **LOAD SW** **MAIN**

Ref. No.	Part No.	Description			Remark
R931	1-216-041-00	METAL CHIP	470	5%	1/10W (AEP,UK)
R934	1-216-017-11	RES-CHIP	47	5%	1/10W (AEP,UK)
R935	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R936	1-216-021-00	METAL CHIP	68	5%	1/10W (AEP,UK)
R941	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R942	1-216-021-00	METAL CHIP	68	5%	1/10W (AEP,UK)
R946	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R947	1-216-021-00	METAL CHIP	68	5%	1/10W (AEP,UK)
R950	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R951	1-216-021-00	METAL CHIP	68	5%	1/10W (AEP,UK)
R960	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R961	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R962	1-216-029-00	METAL CHIP	150	5%	1/10W (AEP,UK)
R966	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP,UK)
R967	1-216-037-00	METAL CHIP	330	5%	1/10W (AEP,UK)
R970	1-216-864-11	METAL CHIP	0	5%	1/10W (AEP,UK)
R971	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R972	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP,UK)
R975	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R976	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R977	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R978	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R979	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R980	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R981	1-216-811-11	METAL CHIP	150	5%	1/10W (AEP,UK)
R982	1-216-811-11	METAL CHIP	150	5%	1/10W (AEP,UK)
R983	1-216-811-11	METAL CHIP	150	5%	1/10W (AEP,UK)
R985	1-216-864-11	METAL CHIP	0	5%	1/10W (AEP,UK)
R986	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R987	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R988	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R989	1-216-840-11	METAL CHIP	39K	5%	1/10W (AEP,UK)
R990	1-216-857-11	METAL CHIP	1M	5%	1/10W (AEP,UK)

< SWITCH >

S902	1-771-884-31	SWITCH, TACTILE (WITH LED) (SOURCE)			(AEP,UK)
S903	1-771-884-31	SWITCH, TACTILE (WITH LED) (DSO)			(AEP,UK)
S911	1-771-884-31	SWITCH, TACTILE (WITH LED) (EQ3)			(AEP,UK)

****

A-3274-254-A LIMIT SW BOARD, COMPLETE
****

< CONNECTOR >

CN13 1-816-275-21 CONNECTOR, FFC/FPC 6P

****

1-685-337-11 LOAD SW BOARD
****

****

A-3274-739-A MAIN BOARD, COMPLETE (US,CND)
A-3274-742-A MAIN BOARD, COMPLETE (AEP,UK)
****

*	3-019-565-01	BRACKET (IC)
	3-041-261-11	BRACKET (TR)
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT
	7-685-793-09	SCREW +PTT 2.6X8 (S)
	7-685-795-09	SCREW +PTT 2.6X12 (S)

< CAPACITOR >

C101	1-136-154-00	FILM	0.012uF	5%	50V
C106	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C109	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C201	1-136-154-00	FILM	0.012uF	5%	50V
C202	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C203	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C204	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C205	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C206	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C207	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C208	1-126-160-11	ELECT	1uF	20%	50V
C209	1-126-160-11	ELECT	1uF	20%	50V
C210	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C211	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C212	1-126-160-11	ELECT	1uF	20%	50V
C213	1-126-160-11	ELECT	1uF	20%	50V
C215	1-104-946-11	ELECT	10uF	20%	35V
C401	1-128-428-11	ELECT	10uF	20%	35V
C402	1-128-428-11	ELECT	10uF	20%	35V
C403	1-128-428-11	ELECT	10uF	20%	35V
C404	1-128-428-11	ELECT	10uF	20%	35V
C405	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C406	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C407	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C408	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V

Ref. No.	Part No.	Description			Remark
C409	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C411	1-124-233-11	ELECT	10uF	20%	16V
C412	1-128-428-11	ELECT	10uF	20%	35V
C413	1-136-177-00	MYLAR	1uF	5%	50V
C415	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C416	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C417	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C418	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C419	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C420	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C421	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C423	1-126-160-11	ELECT	1uF	20%	50V
C424	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C425	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C426	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C427	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C428	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C429	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C503	1-124-259-11	ELECT	4.7uF	20%	16V (AEP,UK)
C505	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C506	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C507	1-124-589-11	ELECT	47uF	20%	16V
C615	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C616	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C617	1-162-916-11	CERAMIC CHIP	12PF	5%	50V (AEP,UK)
C618	1-162-916-11	CERAMIC CHIP	12PF	5%	50V (AEP,UK)
C621	1-164-360-11	CERAMIC CHIP	0.1uF		16V (AEP,UK)
C622	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (AEP,UK)
C623	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V (AEP,UK)
C624	1-164-739-11	CERAMIC CHIP	560PF	5%	50V (AEP,UK)
C629	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-124-589-11	ELECT	47uF	20%	16V
C702	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C703	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C704	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C705	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C712	1-124-584-00	ELECT	100uF	20%	10V
C713	1-124-584-00	ELECT	100uF	20%	10V
C714	1-124-584-00	ELECT	100uF	20%	10V
C715	1-128-057-11	ELECT	330uF	20%	6.3V
C716	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C717	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C718	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C719	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C802	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C803	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C804	1-126-940-11	ELECT	330uF	20%	16V
C805	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C806	1-128-647-11	DOUBLE LAYERS	0.1F		5.5V
C807	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C808	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C809	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C810	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C811	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C812	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C813	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (AEP,UK)
C813	1-216-864-11	METAL CHIP	0	5%	1/10W (US,CND)
C814	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C815	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C816	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C817	1-124-589-11	ELECT	47uF	20%	10V
C818	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C821	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C822	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C823	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C825	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C826	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C827	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C901	1-135-473-21	ELECT	3300uF	20%	16V
C902	1-115-156-11	CERAMIC CHIP	1uF		10V (AEP,UK)
C905	1-115-156-11	CERAMIC CHIP	1uF		10V (AEP,UK)
C907	1-125-972-61	ELECT	100uF	20%	16V
C909	1-126-160-11	ELECT	1uF	20%	50V
C910	1-126-154-11	ELECT	47uF	20%	6.3V
C916	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C917	1-124-584-00	ELECT	100uF	20%	10V
C918	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C920	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C922	1-162-927-11	CERAMIC CHIP	100PF	5%	50V

< CONNECTOR >

CNJ801	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)
CNP701	1-815-260-11	CONNECTOR, BOARD TO BOARD 30P
CNP802	1-569-907-11	SOCKET, CONNECTOR 12P
CNP901	1-774-701-11	PIN, CONNECTOR 16P

< JACK >

CNP801	1-764-270-21	JACK, STEREO MINIATURE (DIA.3.5) (REMOTE IN)

< DIODE >

D701	8-719-991-33	DIODE 1SS133T-77
D801	8-719-083-66	DIODE UDZS-TE-17-18B
D802	8-719-069-56	DIODE UDZS-TE-17-6.2B
D804	8-719-058-24	DIODE RB501V-40TE-17
D805	8-719-083-66	DIODE UDZS-TE-17-18B
D806	8-719-083-66	DIODE UDZS-TE-17-18B
D807	8-719-991-33	DIODE 1SS133T-77
D808	8-719-988-61	DIODE 1SS355TE-17
D809	8-719-988-61	DIODE 1SS355TE-17
D810	8-719-988-61	DIODE 1SS355TE-17
D811	8-719-978-33	DIODE DTZ-TT11-6.8B
D812	8-719-978-33	DIODE DTZ-TT11-6.8B
D813	8-719-978-33	DIODE DTZ-TT11-6.8B
D814	8-719-978-33	DIODE DTZ-TT11-6.8B

MAIN

Ref. No.	Part No.	Description			Remark
D815	8-719-978-33	DIODE DTZ-TT11-6.8B			
D816	8-719-978-33	DIODE DTZ-TT11-6.8B			
D817	8-719-978-33	DIODE DTZ-TT11-6.8B			
D818	8-719-988-61	DIODE 1SS355TE-17			
D819	8-719-988-61	DIODE 1SS355TE-17			
D901	8-719-200-82	DIODE 11ES2			
D902	8-719-200-82	DIODE 11ES2			
D903	8-719-200-82	DIODE 11ES2			
D904	8-719-200-82	DIODE 11ES2			
D905	8-719-200-82	DIODE 11ES2			
D906	8-719-053-18	DIODE 1SR154-400TE-25			
D907	8-719-053-18	DIODE 1SR154-400TE-25			
D908	8-719-200-82	DIODE 11ES2			
D909	8-719-049-38	DIODE 1N5404TU			
D910	8-719-200-82	DIODE 11ES2			
D911	8-719-200-82	DIODE 11ES2			
D912	8-719-978-33	DIODE DTZ-TT11-6.8B			
D915	8-719-200-82	DIODE 11ES2			
D916	8-719-069-55	DIODE UDZS-TE-17-5.6B			
D917	8-719-929-15	DIODE HZS9.1N-B2			
D918	8-719-988-61	DIODE 1SS355TE-17			
D919	8-719-109-89	DIODE RD5.6ES-B2			
D920	8-719-988-61	DIODE 1SS355TE-17			
D921	8-719-988-61	DIODE 1SS355TE-17			
D923	8-719-200-82	DIODE 11ES2			
D925	8-719-978-33	DIODE DTZ-TT11-6.8B			
D926	8-719-921-63	DIODE MTZJ-7.5B			
D927	8-719-069-55	DIODE UDZS-TE-17-5.6B			
		< FERRITE BEAD >			
FB601	1-414-235-22	INDUCTOR, FERRITE BEAD (AEP,UK)			
FB701	1-469-144-21	FERRITE, EMI (SMD)			
FB801	1-414-235-22	INDUCTOR, FERRITE BEAD			
		< IC >			
IC401	6-703-304-01	IC BD3802F-FE2			
IC501	8-759-827-14	IC TA8268AH			
IC601	6-703-809-01	IC SAA6588T/V2-518 (AEP,UK)			
IC701	8-759-679-05	IC TC7WH34FU(TE12R)			
IC801	6-802-685-01	IC MN101C49KSJ			
IC802	6-701-405-01	IC PST3443UL			
IC803	8-759-096-16	IC MM1175XFF			
IC902	6-703-986-01	IC NJU7222U33-TE1			
		< JUMPER RESISTOR >			
JR115	1-216-864-11	METAL CHIP	0	5%	1/10W
JR116	1-216-864-11	METAL CHIP	0	5%	1/10W
JR401	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
JR402	1-216-864-11	METAL CHIP	0	5%	1/10W
JR403	1-216-864-11	METAL CHIP	0	5%	1/10W
JR405	1-216-864-11	METAL CHIP	0	5%	1/10W
JR601	1-216-864-11	METAL CHIP	0	5%	1/10W (AEP,UK)
JR602	1-216-864-11	METAL CHIP	0	5%	1/10W
JR801	1-216-845-11	METAL CHIP	100K	5%	1/10W (US,CND)
JR803	1-216-864-11	METAL CHIP	0	5%	1/10W
JR805	1-216-864-11	METAL CHIP	0	5%	1/10W
JR806	1-216-864-11	METAL CHIP	0	5%	1/10W
JR807	1-216-864-11	METAL CHIP	0	5%	1/10W
JR904	1-216-864-11	METAL CHIP	0	5%	1/10W
JR906	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L701	1-216-864-11	METAL CHIP	0	5%	1/10W
L702	1-414-398-11	INDUCTOR	10uH		
L703	1-469-144-21	FERRITE, EMI (SMD)			
L704	1-414-398-11	INDUCTOR	10uH		
L900	1-419-476-31	COIL, CHOKE	250uH		
		< JACK >			
PJ401	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN, AUDIO OUT REAR/FRONT)			
PJ601	1-793-598-11	JACK (ANTENNA)			
		< TRANSISTOR >			
Q401	8-729-920-21	TRANSISTOR DTC314TK-T-146			
Q402	8-729-920-21	TRANSISTOR DTC314TK-T-146			
Q403	8-729-920-21	TRANSISTOR DTC314TK-T-146			
Q404	8-729-920-21	TRANSISTOR DTC314TK-T-146			
Q602	8-729-055-96	TRANSISTOR SRC1203SF (AEP,UK)			
Q801	8-729-055-96	TRANSISTOR SRC1203SF			
Q802	8-729-055-92	TRANSISTOR SRA2203SF			
Q803	8-729-055-92	TRANSISTOR SRA2203SF			
Q804	8-729-055-96	TRANSISTOR SRC1203SF			
Q805	8-729-055-96	TRANSISTOR SRC1203SF			
Q806	8-729-055-92	TRANSISTOR SRA2203SF			
Q901	8-729-049-40	TRANSISTOR 2SC5343SFG			
Q902	8-729-049-40	TRANSISTOR 2SC5343SFG			
Q903	8-729-015-11	TRANSISTOR 2SD1802FAST-TL			
Q904	8-729-055-92	TRANSISTOR SRA2203SF			
Q905	8-729-055-96	TRANSISTOR SRC1203SF			
Q906	8-729-019-00	TRANSISTOR 2SD2394-G			
Q907	8-729-055-92	TRANSISTOR SRA2203SF			
Q908	8-729-055-96	TRANSISTOR SRC1203SF			
Q909	8-729-049-43	TRANSISTOR STB1132Y			
Q910	8-729-055-96	TRANSISTOR SRC1203SF			
Q911	8-729-049-40	TRANSISTOR 2SC5343SFG			
Q912	8-729-019-00	TRANSISTOR 2SD2394-G			
Q913	8-729-055-92	TRANSISTOR SRA2203SF			
Q914	8-729-055-96	TRANSISTOR SRC1203SF			
Q915	8-729-055-96	TRANSISTOR SRC1203SF			
Q916	8-729-920-85	TRANSISTOR 2SD1664-QR			
Q917	8-729-055-96	TRANSISTOR SRC1203SF			
Q918	8-729-049-43	TRANSISTOR STB1132Y			
Q919	8-729-055-96	TRANSISTOR SRC1203SF			
Q920	8-729-820-46	TRANSISTOR 2SB1202FAS			
Q921	8-729-055-96	TRANSISTOR SRC1203SF			
Q922	8-729-820-46	TRANSISTOR 2SB1202FAS			
Q923	8-729-055-92	TRANSISTOR SRA2203SF			
Q924	8-729-055-96	TRANSISTOR SRC1203SF			
		< RESISTOR >			
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W
R102	1-216-809-11	METAL CHIP	100	5%	1/10W
R103	1-216-809-11	METAL CHIP	100	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R111	1-218-882-11	METAL CHIP	30K	5%	1/10W
R112	1-216-833-11	METAL CHIP	10K	5%	1/10W
R201	1-216-833-11	METAL CHIP	10K	5%	1/10W
R202	1-216-833-11	METAL CHIP	10K	5%	1/10W
R203	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R401	1-247-807-31	CARBON	100	5%	1/4W
R402	1-247-807-31	CARBON	100	5%	1/4W
R403	1-247-807-31	CARBON	100	5%	1/4W
R404	1-247-807-31	CARBON	100	5%	1/4W
R405	1-247-807-31	CARBON	100	5%	1/4W
R406	1-216-841-11	METAL CHIP	47K	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-841-11	METAL CHIP	47K	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R410	1-216-841-11	METAL CHIP	47K	5%	1/10W
R411	1-247-807-31	CARBON	100	5%	1/4W
R412	1-216-841-11	METAL CHIP	47K	5%	1/10W
R413	1-216-821-11	METAL CHIP	1K	5%	1/10W
R414	1-216-833-11	METAL CHIP	10K	5%	1/10W
R415	1-216-821-11	METAL CHIP	1K	5%	1/10W
R416	1-216-833-11	METAL CHIP	10K	5%	1/10W
R417	1-216-841-11	METAL CHIP	47K	5%	1/10W
R418	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R419	1-216-821-11	METAL CHIP	1K	5%	1/10W
R420	1-216-833-11	METAL CHIP	10K	5%	1/10W
R502	1-216-864-11	METAL CHIP	0	5%	1/10W
R505	1-216-864-11	METAL CHIP	0	5%	1/10W
R607	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK)
R608	1-216-797-11	METAL CHIP	10	5%	1/10W (AEP,UK)
R609	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (AEP,UK)
R612	1-216-797-11	METAL CHIP	10	5%	1/10W (AEP,UK)
R620	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP,UK)
R702	1-216-845-11	METAL CHIP	100K	5%	1/10W
R705	1-216-864-11	METAL CHIP	0	5%	1/10W
R706	1-216-864-11	METAL CHIP	0	5%	1/10W
R707	1-216-864-11	METAL CHIP	0	5%	1/10W
R708	1-216-864-11	METAL CHIP	0	5%	1/10W
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-431-11	CARBON	15K	5%	1/4W
R804	1-247-807-31	CARBON	100	5%	1/4W
R805	1-216-809-11	METAL CHIP	100	5%	1/10W
R806	1-469-144-21	FERRITE, EMI (SMD)			
R807	1-469-144-21	FERRITE, EMI (SMD)			
R811	1-216-845-11	METAL CHIP	100K	5%	1/10W
R812	1-216-841-11	METAL CHIP	47K	5%	1/10W
R813	1-216-821-11	METAL CHIP	1K	5%	1/10W
R814	1-216-821-11	METAL CHIP	1K	5%	1/10W
R815	1-216-821-11	METAL CHIP	1K	5%	1/10W
R816	1-216-813-11	METAL CHIP	220	5%	1/10W
R817	1-216-809-11	METAL CHIP	100	5%	1/10W
R818	1-216-809-11	METAL CHIP	100	5%	1/10W
R819	1-216-837-11	METAL CHIP	22K	5%	1/10W
R820	1-216-809-11	METAL CHIP	100	5%	1/10W
R821	1-216-809-11	METAL CHIP	100	5%	1/10W
R822	1-216-809-11	METAL CHIP	100	5%	1/10W
R823	1-216-833-11	METAL CHIP	10K	5%	1/10W
R824	1-216-833-11	METAL CHIP	10K	5%	1/10W
R825	1-216-821-11	METAL CHIP	1K	5%	1/10W
R826	1-216-864-11	METAL CHIP	0	5%	1/10W
R827	1-216-845-11	METAL CHIP	100K	5%	1/10W
R828	1-247-807-31	CARBON	100	5%	1/4W
R829	1-216-809-11	METAL CHIP	100	5%	1/10W
R830	1-216-809-11	METAL CHIP	100	5%	1/10W
R831	1-216-845-11	METAL CHIP	100K	5%	1/10W
R832	1-216-845-11	METAL CHIP	100K	5%	1/10W (US,CND)
R833	1-216-821-11	METAL CHIP	1K	5%	1/10W
R834	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP,UK)
R835	1-216-845-11	METAL CHIP	100K	5%	1/10W
R836	1-216-864-11	METAL CHIP	0	5%	1/10W
R843	1-216-845-11	METAL CHIP	100K	5%	1/10W
R866	1-216-845-11	METAL CHIP	100K	5%	1/10W
R867	1-216-845-11	METAL CHIP	100K	5%	1/10W
R868	1-216-845-11	METAL CHIP	100K	5%	1/10W
R870	1-216-845-11	METAL CHIP	100K	5%	1/10W
R901	1-216-821-11	METAL CHIP	1K	5%	1/10W
R903	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R905	1-216-841-11	METAL CHIP	47K	5%	1/10W
R906	1-216-833-11	METAL CHIP	10K	5%	1/10W
R907	1-216-833-11	METAL CHIP	10K	5%	1/10W
R908	1-216-841-11	METAL CHIP	47K	5%	1/10W
R909	1-216-841-11	METAL CHIP	47K	5%	1/10W
R910	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R911	1-216-845-11	METAL CHIP	100K	5%	1/10W
R913	1-249-427-11	CARBON	6.8K	5%	1/4W
R914	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R915	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R918	1-216-445-11	METAL OXIDE	12	5%	2W
R922	1-247-815-11	CARBON	220	5%	1/4W
R923	1-216-845-11	METAL CHIP	100K	5%	1/10W
R924	1-249-421-11	CARBON	2.2K	5%	1/4W
R925	1-216-821-11	METAL CHIP	1K	5%	1/10W
R926	1-249-413-11	CARBON	470	5%	1/4W
R927	1-249-417-11	CARBON	1K	5%	1/4W
R930	1-216-845-11	METAL CHIP	100K	5%	1/10W
R931	1-249-421-11	CARBON	2.2K	5%	1/4W
R932	1-216-805-11	METAL CHIP	47	5%	1/10W
R934	1-216-845-11	METAL CHIP	100K	5%	1/10W
R935	1-249-421-11	CARBON	2.2K	5%	1/4W

< SWITCH >

S801	1-762-638-21	SWITCH, TACTILE (RESET)
S802	1-786-458-11	SWITCH, PUSH (1 KEY) (NOSE DET)

MAIN **RELAY** **SERVO**

Ref. No.	Part No.	Description			Remark
		< THERMISTOR (POSITIVE) >			
TH900	1-801-792-21	THERMISTOR, POSITIVE			
TH901	1-810-940-11	THERMISTOR, POSITIVE			
		< TUNER >			
TUX501	A-3220-887-A	TUNER UNIT (TUX-030)			
		< VIBRATOR >			
X601	1-760-556-31	VIBRATOR, CRYSTAL (4.332MHz) (AEP,UK)			
X801	1-795-165-11	VIBRATOR, CERAMIC (18.43MHz)			
X802	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
		RELAY BOARD			
		**********			
	1-792-173-11	CABLE, FLAT (FFC) 12P (CNP903)			
		< CAPACITOR >			
C973	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C974	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CNP902	1-817-159-11	SOCKET, CONNECTOR 14P			
		< DIODE >			
D901	8-719-978-33	DIODE DTZ-TT11-6.8B			
D902	8-719-978-33	DIODE DTZ-TT11-6.8B			
D903	8-719-978-33	DIODE DTZ-TT11-6.8B			
D904	8-719-978-33	DIODE DTZ-TT11-6.8B			
D905	8-719-978-33	DIODE DTZ-TT11-6.8B			
D906	8-719-978-33	DIODE DTZ-TT11-6.8B			
D907	8-719-978-33	DIODE DTZ-TT11-6.8B			
LED930	8-719-082-38	LED CL-270SR-C-TS (CD WINDOW)			
LED931	8-719-053-09	LED SML-310VT-T86 (⏏)			
		< RESISTOR >			
R930	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R931	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R932	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
		< SWITCH >			
S931	1-771-884-31	SWITCH, TACTILE (WITH LED) (⏏)			
**********					
	A-3274-698-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-104-609-11	ELECT CHIP	100uF	20%	4V
C5	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C6	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C8	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C9	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C10	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C11	1-162-909-11	CERAMIC CHIP	4PF	0.25PF	50V

Ref. No.	Part No.	Description			Remark
C13	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C14	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C15	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C16	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C17	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C18	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C20	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C21	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C22	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C25	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C27	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C29	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C30	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C34	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C35	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C38	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C39	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C40	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C41	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C44	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C45	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C51	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C53	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C54	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C56	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C57	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C58	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C59	1-104-609-11	ELECT CHIP	100uF	20%	4V
C60	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C61	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C62	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C63	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C65	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C67	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C68	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C69	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C70	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C75	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C77	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C78	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C79	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C81	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C102	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C111	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN1	1-815-352-11	CONNECTOR, BOARD TO BOARD 30P			
CN2	1-794-153-21	CONNECTOR, FPC (ZIF) 16P			
CN3	1-816-275-21	CONNECTOR, FFC/FPC 6P			

Ref. No.	Part No.	Description			Remark
		< FERRITE BEAD >			
FB2	1-216-864-11	METAL CHIP	0	5%	1/10W
FB3	1-216-864-11	METAL CHIP	0	5%	1/10W
FB6	1-469-144-21	FERRITE, EMI (SMD)			
		< IC >			
IC1	8-759-699-98	IC uPD63711GC-8EU			
IC2	8-759-658-87	IC BA5810FP-E2			
IC3	6-703-905-01	IC HD6432238RWN35TEI			
IC4	6-702-661-01	IC UT62L1024LC-55LLI			
IC5	6-702-153-01	IC CXD9684R-005			
IC6	8-759-645-31	IC RN5RZ25BA-TL-FA			
IC7	8-759-491-50	IC TC74VHCT244AFT(EL)			
IC12	8-759-196-96	IC TC7SH08FU-TE85R			
		< JUMPER RESISTOR >			
JR1	1-216-821-11	METAL CHIP	1K	5%	1/10W
JR3	1-216-864-11	METAL CHIP	0	5%	1/10W
JR5	1-216-821-11	METAL CHIP	1K	5%	1/10W
JR6	1-216-864-11	METAL CHIP	0	5%	1/10W
JR12	1-216-864-11	METAL CHIP	0	5%	1/10W
JR13	1-216-864-11	METAL CHIP	0	5%	1/10W
JR14	1-216-864-11	METAL CHIP	0	5%	1/10W
JR15	1-216-864-11	METAL CHIP	0	5%	1/10W
JR17	1-216-864-11	METAL CHIP	0	5%	1/10W
JR21	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L4	1-216-001-00	METAL CHIP	10	5%	1/10W
L6	1-469-144-21	FERRITE, EMI (SMD)			
L8	1-414-398-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
		< RESISTOR >			
R3	1-216-806-11	METAL CHIP	56	5%	1/10W
R5	1-218-344-11	METAL CHIP	7.5K	5%	1/10W
R7	1-216-839-11	METAL CHIP	33K	5%	1/10W
R8	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9	1-216-840-11	METAL CHIP	39K	5%	1/10W
R10	1-216-835-11	METAL CHIP	15K	5%	1/10W
R12	1-216-837-11	METAL CHIP	22K	5%	1/10W
R13	1-216-807-11	METAL CHIP	68	5%	1/10W
R14	1-216-841-11	METAL CHIP	47K	5%	1/10W
R15	1-216-841-11	METAL CHIP	47K	5%	1/10W
R26	1-216-806-11	METAL CHIP	56	5%	1/10W
R29	1-216-833-11	METAL CHIP	10K	5%	1/10W
R30	1-216-833-11	METAL CHIP	10K	5%	1/10W
R45	1-216-845-11	METAL CHIP	100K	5%	1/10W
R46	1-216-845-11	METAL CHIP	100K	5%	1/10W
R47	1-216-845-11	METAL CHIP	100K	5%	1/10W
R48	1-216-845-11	METAL CHIP	100K	5%	1/10W
R49	1-216-845-11	METAL CHIP	100K	5%	1/10W
R50	1-216-809-11	METAL CHIP	100	5%	1/10W
R51	1-216-809-11	METAL CHIP	100	5%	1/10W
R52	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R53	1-216-809-11	METAL CHIP	100	5%	1/10W
R54	1-216-809-11	METAL CHIP	100	5%	1/10W
R55	1-216-809-11	METAL CHIP	100	5%	1/10W
R64	1-216-809-11	METAL CHIP	100	5%	1/10W
R65	1-216-819-11	METAL CHIP	680	5%	1/10W
R67	1-216-845-11	METAL CHIP	100K	5%	1/10W
R68	1-216-857-11	METAL CHIP	1M	5%	1/10W
R69	1-216-813-11	METAL CHIP	220	5%	1/10W
R70	1-216-813-11	METAL CHIP	220	5%	1/10W
R71	1-216-809-11	METAL CHIP	100	5%	1/10W
R72	1-216-809-11	METAL CHIP	100	5%	1/10W
R73	1-216-809-11	METAL CHIP	100	5%	1/10W
R74	1-216-809-11	METAL CHIP	100	5%	1/10W
R75	1-216-809-11	METAL CHIP	100	5%	1/10W
R76	1-216-809-11	METAL CHIP	100	5%	1/10W
R77	1-216-809-11	METAL CHIP	100	5%	1/10W
R78	1-216-809-11	METAL CHIP	100	5%	1/10W
R81	1-216-845-11	METAL CHIP	100K	5%	1/10W
R82	1-216-845-11	METAL CHIP	100K	5%	1/10W
R83	1-216-845-11	METAL CHIP	100K	5%	1/10W
R84	1-216-845-11	METAL CHIP	100K	5%	1/10W
R85	1-216-845-11	METAL CHIP	100K	5%	1/10W
R86	1-216-845-11	METAL CHIP	100K	5%	1/10W
R87	1-216-845-11	METAL CHIP	100K	5%	1/10W
R88	1-216-845-11	METAL CHIP	100K	5%	1/10W
R89	1-216-845-11	METAL CHIP	100K	5%	1/10W
R90	1-216-845-11	METAL CHIP	100K	5%	1/10W
R91	1-216-845-11	METAL CHIP	100K	5%	1/10W
R92	1-216-845-11	METAL CHIP	100K	5%	1/10W
R93	1-216-809-11	METAL CHIP	100	5%	1/10W
R94	1-216-809-11	METAL CHIP	100	5%	1/10W
R95	1-216-809-11	METAL CHIP	100	5%	1/10W
R96	1-216-809-11	METAL CHIP	100	5%	1/10W
R97	1-216-837-11	METAL CHIP	22K	5%	1/10W
R98	1-216-834-11	METAL CHIP	12K	5%	1/10W
R100	1-216-845-11	METAL CHIP	100K	5%	1/10W
R102	1-216-845-11	METAL CHIP	100K	5%	1/10W
R103	1-216-845-11	METAL CHIP	100K	5%	1/10W
R104	1-216-845-11	METAL CHIP	100K	5%	1/10W
R105	1-216-845-11	METAL CHIP	100K	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R107	1-216-821-11	METAL CHIP	1K	5%	1/10W
R109	1-216-845-11	METAL CHIP	100K	5%	1/10W
R111	1-216-845-11	METAL CHIP	100K	5%	1/10W
R113	1-216-845-11	METAL CHIP	100K	5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R115	1-216-837-11	METAL CHIP	22K	5%	1/10W
R116	1-216-809-11	METAL CHIP	100	5%	1/10W
R117	1-216-809-11	METAL CHIP	100	5%	1/10W
R118	1-216-809-11	METAL CHIP	100	5%	1/10W
R119	1-216-821-11	METAL CHIP	1K	5%	1/10W
R121	1-216-845-11	METAL CHIP	100K	5%	1/10W
R124	1-216-837-11	METAL CHIP	22K	5%	1/10W
R126	1-216-845-11	METAL CHIP	100K	5%	1/10W
R127	1-216-845-11	METAL CHIP	100K	5%	1/10W
R128	1-216-845-11	METAL CHIP	100K	5%	1/10W
R129	1-216-845-11	METAL CHIP	100K	5%	1/10W
R130	1-216-809-11	METAL CHIP	100	5%	1/10W

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Ref. No.	Part No.	Description			Remark
R131	1-216-809-11	METAL CHIP	100	5%	1/10W
R132	1-216-809-11	METAL CHIP	100	5%	1/10W
R133	1-216-809-11	METAL CHIP	100	5%	1/10W
R134	1-216-809-11	METAL CHIP	100	5%	1/10W
R135	1-216-809-11	METAL CHIP	100	5%	1/10W
R136	1-216-809-11	METAL CHIP	100	5%	1/10W
R142	1-216-815-11	METAL CHIP	330	5%	1/10W
R143	1-218-484-11	METAL CHIP	750	5%	1/10W
R144	1-216-812-11	METAL CHIP	180	5%	1/10W
R145	1-216-817-11	METAL CHIP	470	5%	1/10W
R146	1-216-815-11	METAL CHIP	330	5%	1/10W
R147	1-218-484-11	METAL CHIP	750	5%	1/10W
R148	1-216-809-11	METAL CHIP	100	5%	1/10W
R149	1-216-814-11	METAL CHIP	270	5%	1/10W
R150	1-216-821-11	METAL CHIP	1K	5%	1/10W
R151	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R152	1-216-813-11	METAL CHIP	220	5%	1/10W
R153	1-216-818-11	METAL CHIP	560	5%	1/10W
R154	1-216-809-11	METAL CHIP	100	5%	1/10W
		< NETWORK RESISTOR >			
RB1	1-233-576-11	RES, CHIP NETWORK 100X4			
RB2	1-233-576-11	RES, CHIP NETWORK 100X4			
		< VIBRATOR >			
X1	1-795-520-11	VIBRATOR, CERAMIC (16.9344MHz)			
X2	1-795-127-21	VIBRATOR, CERAMIC (12.288MHz)			
**********					
		MISCELLANEOUS			
		**********			
9	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (US,CND)			
9	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)			
207	1-823-951-11	CABLE, FLEXIBLE FLAT (16 CORE)			
⚠210	8-820-165-06	OPTICAL PICK-UP KSS-721A/C-RP			
211	1-676-707-11	PICK-UP FLEXIBLE BOARD			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)			
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)			
**********					
		ACCESSORIES			
		**********			
	1-476-526-34	REMOTE COMMANDER (RM-X115)			
	3-230-047-01	LID, BATTERY CASE (for RM-X115)			
	3-251-806-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH) (US,CND)			
	3-251-806-31	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH) (AEP,UK)			
	3-251-853-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (US,CND)			
	3-251-853-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN,FRENCH,ITALIAN,DUTCH) (AEP,UK)			
	X-3378-390-3	CASE ASSY (for FRONT PANEL) (US,CND)			
	X-3378-490-2	CASE (PANEL) ASSY (for FRONT PANEL) (AEP,UK)			
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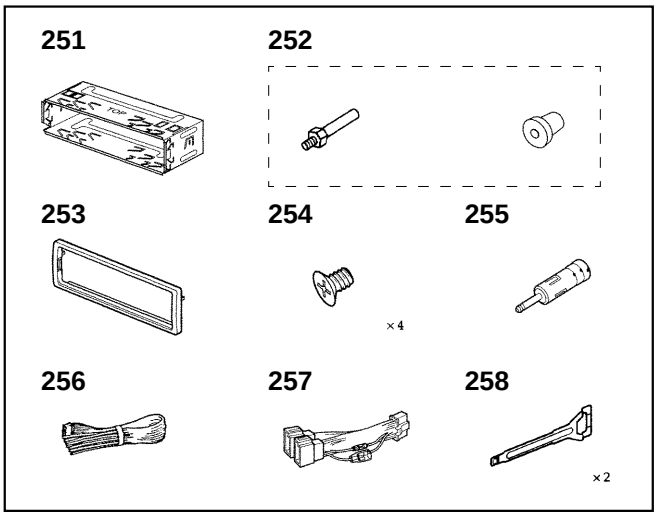
Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
251	X-3382-647-1	FRAME ASSY, FITTING	
252	X-3366-405-1	SCREW ASSY (EXP), FITTING (AEP,UK)	
253	3-246-035-01	COLLAR	
254	3-934-325-01	SCREW (+K 5X8 TP) (US,CND)	
255	1-465-459-21	ADAPTOR, ANTENNA (AEP,UK)	
256	1-776-207-82	CORD (WITH CONNECTOR) (POWER) (US,CND)	
257	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)	
258	3-246-471-01	KEY (FRAME)	



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003. 01	New